EXPERIENCES OF MINDFULNESS-BASED RELAPSE PREVENTION ON THE SMOKING BEHAVIOR OF WORKING WOMEN

PhD Synopsis submitted to CHRIST (Deemed to be University)

as partial requirement for the award of the Degree of

DOCTOR OF PHILOSOPHY

IN

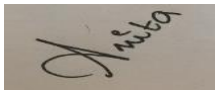
PSYCHOLOGY

by

ANITA MARY VADIVALE

Under the Supervision of
Anuradha.S
Professor-Department of Psychology

CHRIST
(DEEMED TO BE UNIVERSITY)
BANGALORE · INDIA



Signature of Scholar

Signature of Supervisor(s)

CENTRE FOR RESEARCH
CHRIST (Deemed to be University)
BENGALURU

JULY 2020

CENTRE FOR RESEARCH

Approval of PhD Synopsis

[as per clause 11(k.) of CU Regulation for the Degree of Doctor of Philosophy, May 2019]

Name of Scholar:	ANITA MARY VADIVALE
Department:	PSYCHOLOGY
Name of Co Supervisor:	NA
Names of Research Advisory Committee: 1. Dr. Manoj Sharma 2. Dr. Jayasankara Reddy	
Name and Designation of External Reviewer if applicable:	
Date of Synopsis Presentation:	10-7-2020
Title of the PhD thesis:	Experiences of Mindfulness-Based Relapse Prevention on the Smoking Behaviour of Working Women
Approved by: 1. Name of Supervisor: Dr.Anuradha.S Signature: 2. Name of RAC Member: Dr.Manoj Sharma Signature: 3. Name of RAC Member: Dr.JayasankaraReddy Signature:	

Head of Department ----------

Date of approval by Doctoral Committee: 3-7-2020

Director Centre for Research

Abstract

Smoking is the highest cause of preventable deaths in the world. The number of working women prone to addiction is high due to the levels of stress witnessed. The number of working women who have taken up to smoking has increased and is said to increase by 20 percent by the year 2025 if not addressed. Mindfulness, a Buddhist meditative technique helps with managing addiction to nicotine. Mindfulness based relapse prevention has showed promise to reduce relapse levels amongst people who smoke. The primary objective of the study is to check the experiences of mindfulness-based relapse prevention (MBRP) on the smoking behaviour of working women in India. An embedded experimental design was carried out on eight working women who were selected using purposeful sampling. The participants went through eight two-hourly sessions of MBRP therapy, one session a week. Three sets of interviews (pre-intervention, mid intervention and post-intervention) were conducted including pre and post-test to check the levels of abstinence self-efficacy, mindfulness, perceived stress and craving. Follow up was carried out one week, one, two and six months post intervention. Thematic analysis was used for interpretation of qualitative data and paired sample t test was used for analysis of quantitative data. Themes that emerged were experiences with the habit of smoking, which included history of initiation, reasons for smoking, transformation seen and history of quit attempts. Four weeks into the intervention the themes that emerged were impactful components within self, supporting outcomes of practise and challenging experiences. Post the intervention experiencing changes, experiencing challenges through the intervention and strategies for abstinence and continued practise emerged. Mindfulness and abstinence self-efficacy had risen whereas craving and stress had reduced. Follow up at one week showed no changes in results. One and two months follow up showed reduced practise hours of mindfulness with no full-blown relapse. Six months follow up showed 37.5 percent relapse with reduction in number of cigarettes consumed. Though

beneficial for smoking relapse prevention efficacy reduces post-intervention, where regular follow up sessions, are required for the continued practice of mindfulness.

Keywords: smoking cessation, smoking relapse prevention, mindfulness, mindfulness based relapse prevention, working women

Table of Contents

S.no	Contents	Page. No
1	Chapter 1- Introduction…….	1
2	Chapter 2- Review of Literature……	10
3	Chapter 3- Methods……	13
4	Chapter 4- Results and Discussion…….	25
5	Chapter 5- Summary and Conclusion……	70
6	References……	74
7	Appendices……..	96

List of Tables

Table		Page. No
3.1	Sessions in Mindfulness-based relapse prevention……	19
4.1	Socio demographic information of the participants……...	26
4.2	Experiences of working women on their smoking behavior…..	29
4.3	Experiences of working women during MBRP intervention….	43
4.4	Experiences of working women post completion of MBRP intervention…….	58
4.5	Test of normality……	64
4.6	Mean values of pre and post-test scores of abstinence self-efficacy amongst nicotine-dependent working women……	65

4.7	Mean values of pre and post-test scores of mindful attention awareness levels amongst nicotine-dependent working women…	66
4.8	Mean values of pre and post-test scores of perceived stress levels amongst nicotine-dependent working women……	67
4.9	Table showing follow up results……	69

List of Figures

Figure		Page. No
3.1	Data collection process……	19

Chapter 1

Introduction

"We are addicted to our thoughts. We cannot change anything if we cannot change our thinking." Santosh Kalwar (2010)

Smoking is the highest cause of preventable deaths in the world (World Health Organization, 2015). Tobacco is said to kill up to half of its users. WHO 2019 reports state that over eight million people succumb to tobacco-related diseases every year. Over seven million deaths a year result directly due to the use of tobacco and its products whereas almost 1.2 million people who do not smoke are said to die every year due to exposure to second-hand smoke (WHO, 2019). In 2004, 28 percent of the deaths caused by second-hand smoke were reported to be children. Currently, the rate of deaths in children that could be attributed to second-hand smoke is at an alarming 65000 (WHO, 2019). According to the World Health Organization (WHO), over 1.1 billion people were recorded as employees with nicotine dependence in the year 2015 (WHO, 2015). Though the numbers are reducing, there is still a large smoking population (WHO, 2017). Out of 4000 and more chemicals found in tobacco smoke at least 50 of them are known to cause cancer (WHO, 2019). More people die each year from tobacco-related diseases than AIDS, use of psychotropic drugs, alcohol etc.(Centres for disease control and prevention, 2002)

According to the WHO's 2015 reports, 9.4 percent of men and 0.8 percent of women in India, above the age of 15 years, are tobacco consumers (WHO, 2015). According to the General Agreement on Trade in Services (GATS) general adult tobacco survey of India in 2016-17, currently 2 percent of Indian women are tobacco smokers. (GATS, 2018). India is said to have the second highest number of female smokers globally after the US (Sinha, TOI, 2014).

Though the global trend in smoking behaviour has reduced there is an increase in the percentage of women smokers in India (2.7 percent to 3.3 percent) (Ng, Freeman, Fleming, Robinson, Dwyer-Lindgren, Thomson, et al., 2014). Overall smoking among women is seen to have doubled in India from 2005 (Goel, Tripathy et.al., 2014). South-western states (Pondicherry, Tamil Nadu, Karnataka, Kerala, Maharashtra, Goa) have an increasing trend of women smoking (GATS, 2010) .17.3 percent of working women were seen to be active cigarette smokers in India. (National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2014). The results showed varying smoking prevalence levels depending on the occupation and Industry (Mazurek & England, 2016). More working women are taking up to smoking due to peer pressure and stress.(Rawat, 2018). Women employees are under stress and are prone to addictions. The levels of stress and their personality makes them more susceptible to taking to smoking. (Mishra, Majmudar, Gupta, Rane, Hardikar & Shastri, 2010; Mohanty & Madhumita, 2014).Young women professionals living away from family, pop culture, newfound freedom and high stress jobs are seen to take to smoking in Bangalore (Anien, DH News, 2018). Smoking effects men and women differently. Reinforcing effects of nicotine are seen to make men smoke whereas women smoke to regulate mood or in response to cigarette-related cues (NIDA, 2020). Unless sustained smoking is likely to rise by 20 percent by 2025 (Mackay & Amos, 2003).

Women may be more susceptible to smoking-related morbidity and mortality (Allen, Oncken, & Hatsukami, 2014). Around 1.5 million women die every year due to tobacco, 75percent of whom live in low and middle-income families. (WHO, 2010). Risk of lung cancer is 20 times higher in women who are heavy smokers. (NJH, 2020). Smoking is directly to linked to 80 percent of Chronic Obstructive Pulmonary Disease (COPD)deaths in women each year and greater risk of stroke. Smoking ages women. Smokers have more facial wrinkles, gum disease, dental decay, and halitosis (bad breath). Women smokers are more

likely to be depressed than non smokers and women with anxiety disorders are more likely to smoke. (NJH, 2020). Cigarette smoking has many adverse reproductive and early childhood effects, including an increased risk for infertility, preterm delivery, stillbirth, low birth weight and sudden infant death syndrome (SIDS). (NJH, 2020) Changes have also been seen in the sex hormones in women smokers (Bjarnason, Jorgensen & Christiansen, 2012)Women who smoke have higher rates of asthma (Chen Y & Mai X-M, 2011)Women smokers often have symptoms of menopause about three years earlier than non-smokers. Postmenopausal women who smoke have lower bone density than women who never smoked. (NJH, 2020).

35.5 percent of the smoking women population in India have attempted to quit out of 46.4percent who were contemplating to do so. (GATS, 2018). 16.8percent of daily women smokers have quit. (GATS, 2018). Relapse rates are said to be at 60 to 90percent within the first year but significantly drop post the second year. (Schayck, Tuithof, Otten, Engels & Kleinjan, 2019). Relapse rates are higher in women due to high cortisol levels which are predictive of relapse (al'Absi, Nakajima, Allen, Lemieux & Hatsukami, 2015). Research suggests that women experience stronger craving than men in response to stress (Wray, Gray, McClure, Carpenter, Tiffany & Saladin, 2015). Causes for relapse among women vary from that of men and include stress, weight control and negative emotions. (NJH, 2020). Evidence suggests work environment including social support positively associated with cessation and negatively with relapse (Albersten, Borg & Oldenburg, 2006).

Mindfulness

Mindfulness has been developed from the age-old meditative technique Vipassana, which is an established Buddhist meditative practice. "It is the English translation of the Pali word Sati" (Gunaratana, 2011). Though it does not explicitly reference Buddhism, mindfulness uses its baseline principles from their teachings. Buddhist philosophy states that observation of thoughts, sensations, and emotions as something impermanent, rather than

something unchangeable, is the key to relief from suffering(Marlatt, Bowen, Chawla & Witkiewitz, 2008). A Vipassana training lasts for 11 to 21 days where participants engage in a meditative practice for a minimum of 10 to 11 hours a day. The main idea of this practice is to decondition the mind from holding on to thoughts, but recognizing thoughts as thoughts and letting them go (Goenka,1987). It has been said that humans, on a daily basis, attend to hardly one percent of all stimuli perceived (Gunaratana, 2011; Kabat-Zinn, 2001).

The Buddhist psychological model states that an individual can be aware of one sensation at a time. The 'feeling tone' which could be either pleasant, unpleasant or neutral goes unnoticed due to the rapid nature of these sensations leading to suffering. These are appraisal systems cause aversions or attachments which creates habitual behaviour. With mindfulness there is focussed attention one directly attends to these three characteristics by bringing awareness to the qualities of the breath. There in in turn a development of insight in the practitioner (Grabovac, Lau & Willet, 2011)

Mindfulness is being aware of one's thoughts, emotions, and sensations. Practicing mindfulness helps increase such awareness, and in turn, the individual starts to view his or her universe in a new light (Gunaratana, 2011). Mindfulness helps the practitioner to attend to their bodily sensations but also lets them pass non-judgmentally and objectively. By doing this, the practitioner is aware of what he or she is feeling but does not react to the sensations, rather just observes them and lets them pass. "Knowing what you are doing while you are doing it is the essence of Mindfulness practice" (Kabat-Zinn, 1990).This practice helps the practitioner move closer to reality. The individual is not taught to isolate their feelings but rather to attend to such feelings, may they be good or bad, and not hold on but to let them pass (Gunaratana, 2011). Holding on to preferences would only make individuals live in clutches but with the art of letting go, individuals only pay attention to what makes them start living consciously (Kabat-Zinn, 2001). Trait mindfulness is a division of mindfulness which

looks at the presence or absence of attention or the ability to be aware of what is happening in an momentary experience.(Black, Sussman, Johnson, Milam, 2014). Automacity and attention is reduced with addiction, both seen to be present with higher levels of trait mindfulness (Garland, 2011).Those with low trait mindfulness are seen to be more dependent on tobacco (Karyadi, VanderVeen, & Cyders, 2014). Trait mindfulness is seen to increase with mindful practise (Kiken, Garland, Bluth, Palsson, & Gaylord, 2015).

Continued practice of mindfulness has been seen to be beneficial to reduce levels of anxiety, depression, anger, dissociation, rumination, alexithymia, difficulties in emotion regulation, experiential avoidance, and intensity of psychotic delusions (Greeson, 2009; Keng, Smoski, & Robins, 2011; Luberto, 2013). Mindfulness that has been practised amongst the smoking population has seen the intake of cigarettes to have reduced, though no benefit was seen with the levels of distress tolerance (Luberto, 2015). Mindfulness has also been practiced amongst people who are suffering from substance abuse and was seen to be beneficial to them (Brewer, Sinha, Chen, Michalsen, Babuscio, Nich, et al., 2009) Practising mindfulness over time was seen to reduce stress, and also reduce symptoms of diabetes (Van Son , Nyklicek , Pop , Blonk , Erdtsieck , Spooren , et al, 2013), and hypertension (Hughes, Fresco, Myerscough , Van Dulmen, Carlson & Josephson, 2013). It has also proved beneficial as a pain-relieving technique to relieve pain in patients suffering from cancer (Hoffman, Ersser, Hopkinson, Nicholls, Harrington & Thomas, 2012; Montoya, Levis, Kwakkenbos, Russell, Steele, Turner & Thombs, 2016). Mindfulness has only recently been looked into as an intervention for addiction. Some methods of treatment being mindfulness-based cognitive behaviour therapy, mindfulness-based stress reduction and mindfulness to reduce depressive symptoms, and also pain and anxiety. Controlled researches show that mindfulness helps in the acceptance of craving and withdrawal, and hence environmental cues do not affect relapse (Miller & Craig, 2014). Researches done show that significant

interaction is seen for negative effect reduction, smoking outcome expectancies, and mindful attention. Those with higher mindful attention were seen to be less vulnerable to such abuse (Gonzalez, Vujanovic, Johnson, Leyro, & Zvolensky, 2009). Mindfulness was also seen to increase levels of consciousness in second-hand smoke avoidance (Gao & Shi, 2015). Mindfulness practice is seen to increase self-efficacy and bring about a positive relationship between the length of alcohol abstinence and self-efficacy (Link, 2013). Mindfulness was seen to help reduce urges, perceived stress, and experiential avoidance, among a smoking population (Davis, Manley, Goldberg, Smith, & Jorenby, 2014). Mindfulness was also seen to reduce negative affect among individuals who smoke (Bowen, 2008).

Continued practice of mindfulness has been seen to be beneficial to reduce levels of anxiety, depression, anger, dissociation, rumination, alexithymia, difficulties in emotion regulation, experiential avoidance, and intensity of psychotic delusions (Greeson, 2009; Keng, Smoski, & Robins, 2011; Luberto, 2013) Mindfulness that has been practised amongst the smoking population has seen the intake of cigarettes to have reduced, though no benefit was seen with the levels of distress tolerance (Luberto, 2015). Mindfulness has also been practiced amongst people who are suffering from substance abuse and was seen to be beneficial to them (Brewer, Sinha, Chen, Michalsen, Babuscio, Nich, et al., 2009) Practising Mindfulness over time was seen to reduce stress, and also reduce symptoms of diabetes (Van Son , Nyklicek , Pop , Blonk , Erdtsieck , Spooren , et al, 2013), and hypertension (Hughes, Fresco, Myerscough , Van Dulmen , Carlson & Josephson, 2013). It has also proved beneficial as a pain-relieving technique to relieve pain in patients suffering from cancer (Hoffman, Ersser, Hopkinson, Nicholls, Harrington & Thomas, 2012; Montoya, Levis, Kwakkenbos, Russell, Steele, Turner & Thombs, 2016). Mindfulness has only recently been looked into as an intervention for addiction. Some methods of treatment being mindfulness-based cognitive behaviour therapy, mindfulness-based stress reduction and mindfulness to

reduce depressive symptoms, and also pain and anxiety. Controlled researches show that mindfulness helps in the acceptance of craving and withdrawal, and hence environmental cues do not affect relapse (Miller & Craig, 2014). Researches done show that significant interaction is seen for negative effect reduction, smoking outcome expectancies, and mindful attention. Those with higher mindful attention were seen to be less vulnerable to such abuse (Gonzalez, Vujanovic, Johnson, Leyro, & Zvolensky, 2009). Mindfulness was also seen to increase levels of consciousness in second-hand smoke avoidance (Gao & Shi, 2015). Mindfulness practice is seen to increase self-efficacy and bring about a positive relationship between the length of alcohol abstinence and self-efficacy (Link, 2013). Mindfulness was seen to help reduce urges, perceived stress, and experiential avoidance, among a smoking population (Davis, Manley, Goldberg, Smith, & Jorenby, 2014). Mindfulness was also seen to reduce negative affect among individuals who smoke (Bowen, 2008).

Mindfulness-based relapse prevention- Origin and goals

Mindfulness-based relapse prevention (MBRP) has been developed by Bowen, Chawla, Marlatt at the Addictive Behavioural Research Center, by integrating three different therapies, Mindfulness-based stress reduction by Kabat-Zinn, mindfulness-based cognitive therapy by Segal, Williams and Teasdale and the relapse protocol by Daley and Marlatt. It has been seen to have greater success in relapse prevention than other forms of treatment. (Bowen, Chawla & Marlatt, 2008). MBRP helps in bringing mindful awareness to individuals suffering from addictions. Such understanding is brought by being aware of triggers, destructive habitual patterns and automatic reactions that take control. The exercises integrated into MBRP helps the practitioner pause, observe the present experience, and bring awareness to the range of choices available, before acting on the same. Such decisions make one respond in ways that are better for the individual rather than ways that are detrimental by nature. MBRP helps the individual become free from addictive bondages. These skills are

combined with traditional relapse prevention practices to develop effective coping mechanisms, increasing self-efficacy and being able to recognise triggers and antecedents to abuse of the substance (Marlatt et al., 2008). The focus is not on doing what is right or making better decisions but rather is on 'just being in the moment' (Segal et al., 2002). The treatment mainly revolves around identifying the individual's high-risk situations where relapse is more prone to occur. This is done by being able to recognise early warning signs for relapse and increase awareness of triggers such as people or places that relate the individual to the substance use. The practise of mindfulness provides practitioners with new ways of processing risky situations and environmental cues (Marlatt, Bowen, Chawla & Witkiewitz, 2008).

The primary goals of MBRP are to become aware of personal triggers and spontaneous reactions, create ways to pause before following automaticity, have a better understanding of discomfort, recognise difficult emotions or sensations and respond to them with more skill, learn to be non-judgemental and compassionate to oneself, and build a lifestyle that supports both mindfulness practise and recovery (Marlatt, 2002).

The MBRP program is an eight-week closed group intervention program. The size of the group can vary from six to twelve participants. Each session is timed for two hours, where a new part of mindfulness is introduced and practised, and homework is discussed and given. Several research studies on different groups prove the eight-week MBRP program beneficial for relapse prevention in addictive behaviour. Each session of MBRP is developed in progression and has a specific purpose and outcome.

Need and significance of the study

Though various techniques have been established for helping people quit smoking, relapse rates amongst working women who are cigarette consumers are still seen to be very high with a meagre five per cent of the population being able to abstain without any

intervention (WHO, 2015). Such high relapse rates especially amongst self- quite attempts shows the need for relapse prevention treatments. Working individuals are seen to be more prone to substance dependence and statistics show that working women have higher rates of cigarette consumption (The Indian Express, 2009). Women who smoke in India are on the rise. (Goel, Tripathy et.al., 2014) and working women are seen to smoke more because of stress (Mishra, Majmudar, Gupta, Rane, Hardikar & Shastri, 2010; Mohanty & Madhumita, 2014). Young women professionals living away from family, pop culture, newfound freedom and high stress jobs are seen to take to smoking in Bangalore (Anien, DH News, 2018). Alternative therapies are being used more and show benefits for dependencies (Tabish, 2008). Alternate forms of treatment are the need of the hour for individuals who smoke and one must understand how they work (Shiffman, 2006) . Women who smoke benefit more from behavioural interventions as treatment for women must address several other issues that often emerge, and these are most likely to require alternative behavioural interventions (Perkins, 2001). MBRP is seen to show results when it comes to prevention of relapses with different types of addiction (Bowen, Chawla, Marlatt, 2008). Given the growing levels of smoking related behaviour, the high relapse rates and the lack of relapse prevention treatments and research in the area the need for assessing the experiences of MBRP on such nicotine dependent individuals could prove beneficial.

Research question

From the currently existing knowledge, one cannot conclude what the experiences are for an individual who is undergoing MBRP to break their habit of smoking and not relapse into cigarette consumption. It also cannot be concluded that MBRP therapy works on working women’s smoking behaviour.

The researcher, having studied the benefits of the program and the need for intervention amongst the said population, asks the question 'what are the participants'

experiences through the eight-week program and how would this program work on relapse prevention amongst such a population?'

Chapter 2

Review of Literature

This section of the literature review shows how mindfulness works on addiction amongst various populations. When compared with other forms of interventions, mindfulness has better effects as it reduced distress tolerance and affected smoking behaviour. Mindfulness also reduces the negative effect and urges in smoking.

Luberto, (2015) in her research titled 'An experimental test of the effects of a brief mindfulness exercise' on distress tolerance among adult cigarette smokers, went on to check the effect brief mindfulness exercises have on the tolerance of distress amongst adults who are cigarette smokers. Results showed that the intervention increased state mindfulness significantly and reduced distress tolerance.

Daunter, (2013) in his research titled 'The effects of mindfulness on smoking behaviour and craving' included adult smokers who consumed more than five cigarettes daily, and have smoked for a minimum of ten years. Qualitative analysis showed a reduction in stress, increased levels of calmness, and increased awareness amongst the participants.

Mallik, (2013) in his study titled 'Role of home practice in a randomized controlled trial of mindfulness training for smoking cessation' showed that home practice was not related to the outcomes of individuals receiving FFs. The more time a participant practiced, the lesser was the consumption of cigarettes as seen in the results. No association was seen in practice and follow up at 17 weeks. Thus mindfulness was helpful in reducing the consumption of cigarettes but did not relate to the outcomes of other treatments for the same.

When it came to mindfulness-based interventions on cigarette consumers, it was seen that mindful smoking reduced the consumption of cigarettes amongst the population, but did not necessarily result in cessation. Thus mindfulness alone may not work, but cognitive techniques in addition to stress management techniques used in MBRP may help see changes in these results.

Heppner, Spears, Correa-Fernández, Castro, Li, Guo, and Wetter, (2016) in the study titled 'Dispositional mindfulness predicts enhanced smoking cessation and smoking lapse recovery' included 399 African Americans seeking smoking cessation treatment to check dispositional mindfulness, smoking abstinence, and recovery from relapses in them. Those having higher levels of mindfulness were seen to be more likely to recover from a relapse that happened within 3 days of the quit. Mindfulness was also seen to lower negative effect amongst the participants.

Elwafi, (2012) conducted a study to check how mindfulness treatment works on smoking cessation called 'Craving and quitting: An exploration of how mindfulness training may help smokers to quit.' Results showed that there was a strong positive correlation seen between craving and the number of cigarettes smoked, and this was seen to disappear after mindfulness practice. Final results showed that mindfulness treatment broke the relationship between craving and smoking.

Mc Cabe, (2014) in their study titled 'A mindfulness-based intervention to decrease cigarette use in young adults' showed that there was partial support for the decrease in smoking frequency. Intervention support was also seen to increase levels of mindfulness, especially non judging of internal experiences.

Arcari, (1996) conducted a study titled 'Efficacy of a workplace smoking cessation program: Mindfulness meditation vs cognitive-behavioural interventions' showed that subjects, regardless of group membership, demonstrated significantly lower cotinine,

depression, distress, and the number of cigarettes smoked. The group that received MM did not practice the same regularly at home. This would have been the reason for the results amongst both groups showing equal outcomes.

Uhlig, (2009) conducted a study titled 'Mindfulness-based relapse prevention and the matrix model in substance abuse relapse prevention.' This experimental study was conducted to check if Mindfulness-Based Relapse Prevention when included in a program like a matrix model, could make a significant difference in client outcomes. Results showed that there were significant improvements in attendance and abstinence

Haig, (2017) conducted a research titled 'A phenomenological exploration of female participants' experiences of mindfulness-based relapse prevention (MBRP)' 10 women participated by taking up a semi structured interview. Four categories of a total of 16 themes were developed. Results of the themes were (1) impactful components, (2) challenging experiences, (3) processes supporting outcomes, and (4) outcomes. Overall results indicated that the intervention could be helpful in bringing about desired outcomes.

Marcus, and Zgierska (2010), discussed various researches that were conducted on relapse prevention using mindfulness-based relapse prevention therapy. They concluded that mindfulness encourages awareness and acceptance of thoughts, feelings, and bodily sensations as they arise, and recognition of their impermanence.

Roos, Stein, Bowen & Witkiewitz (2019) in their research showed that Group based MBRP programs had better results than group based RP especially with the group having at least one third women.

De Souza et.al (2020) research stated that MBRP is feasible and shows promise in preventing relapses in smoking. Cravings are seen to reduce and mindfulness levels increase with better abstinence rates at week 24.

In Khayyer, Azad, Dadjoo & Shojaei (2019) study titled Transcranial Direct Current Stimulation Combining Mindfulness Based Relapse Prevention for Smoking Cessation: A Case Report it was seen that MBRP showed great decrease in craving and also in number of cigarettes consumed at three month follow up reducing from 30 to two a day.

Summary

Mindfulness-based relapse prevention, though not researched on amongst the smoking population, has been seen to be extremely beneficial in treating other forms of addiction where relapse rates have been seen to be very low. Hence a clear gap seen in literature paves way for more research to be done in this area.

Aim

The present study aims to explore the experiences of the participant undergoing MBRP for smoking behaviour.

Objective

The objective of the study was to understand working women's smoking behaviour before the intervention, their experience with MBRP on smoking behaviour mid-way into the intervention and post completion of the MBRP intervention.

Chapter 3

Method

Research Design

Embedded research design was used for the research. The embedded design is a mixed method of research (Creswell, 2009). The embedded design is used to mix different data sets with one data set being embedded within another (Caracelli & Greene,1997). This is used as a single data set is not sufficient as different questions need to be answered (Creswell, Plano, Clark, et al., 2003) and the objective of the research is to get answers from different

stages. The quantitative finding supplements the qualitative results. (Creswell, Plano, Clark, et al., 2003).

This design included a qualitative interview and quantitative pre-measures that were conducted before the intervention. Midway into the intervention, another qualitative interview was conducted. After completion of the intervention quantitative post measures and a qualitative interview was conducted.

The major benefit of this design is that 'one data set provides a supportive, secondary role in a study based primarily on the other data type.' (Creswell, Clark, Gutmann, & Hanson, 2003). This design can be used when a single data set is insufficient and the researcher needs multiple data sets to come to an informed conclusion (Creswell, 2006).

This research design helps in giving an in-depth understanding of how an intervention is working through different stages by using both quantitative and qualitative measures. Using this research would help the researcher not just understand the experience of the participants at the end of the study, but through different time frames of the study, using the interview method. The qualitative analysis will help the researcher see growth through factual terms using pre and post-test analysis. Using such designs would help check how experiences have transitioned over time, through different phases of the study.

Sampling

Purposive sampling was used in the research. According to Ritchie, et. al., purposive sampling is where 'members of a sample are chosen with a purpose to represent a location or type with relation to the criterion ' (Ritchie & Lewis, 2003). One can think and define parameters for including participants from the whole population into the sample (Miles and Huberman, 1994). This sampling technique is a non-random technique that uses participants based on the qualities the participants possess. Purposive sampling is used in qualitative and

mixed-method research designs to get information-rich cases for the best utilization of information (Etikan, Musa, & Alkassim, 2016).

This research focused on participants who were looking for alternative therapies to prevent relapse post their self abstinence and hence it fell under the purposive sampling category.

Recruitment of the participants occurred by blasting posts about the research on Facebook groups and other closed groups on social media. Area-specific open and closed groups were accessed via social media and announcements about the program were made. Specific areas were looked into due to the convenience that the participants could attend the intervention with ease. Human resource personnel from different companies such as Ernst and Young, IBM, Accenture, HCL, Cognizant, RR Donnelly, etc were contacted to send out information about the free intervention program that was available. These contacts were established by the researcher through common groups and Facebook updates. An understanding of the program, basic details on the population being looked at, and the eligibility of the candidates needed were given in these announcements. Announcements were made via Whatsapp broadcast messages to advertise the program using the researcher's professional contacts as well as counselling and mental health groups available to the researcher. Contact details were given in all advertisements. The researcher then followed up with all connected people via telephone, to check for any employee leads to take the process to the next stage.

Once the researcher got response calls from interested potential participants, the researcher explained the aims and the procedure in brief, via telephone. The purpose of the research was discussed, the area in which the program was to take place was stated, and the

time commitment that was needed from the participant was also announced. 33 participants showed an interest in the programme and agreed to participate in the screening.

Participants

Once the 33 participants were contacted, the researcher looked into criteria that were needed in the participants for them to be included in the research. The participant should have been a currently employed female between the age of 25 and 45 years who consumed cigarettes for the past year or more. There were no restrictions on the sector of work chosen. The participant should have consumed a minimum of 10 cigarettes per day but not more than twenty. This inclusion made all participants come under the level of moderate cigarette consumers. Only participants who were looking for alternate forms of therapy soon after they quit by themselves, for prevention of relapse, were considered. Those individuals who consumed alcohol daily, or were in the habit of doing drugs, were not included in the study as this would have hindered with the findings. All participants did not practice any other forms of meditation or yoga when recruited and remained so through the intervention. Participants were not interested in taking up any other forms of nicotine replacement therapy in fear of side effects or go through psychiatric centres for de addictive care. An alternate form of therapy seemed to be the safest in their opinion which did not include indigestion of drugs and as per their opinion fell in the holistic enhancement form of therapy. 21 of the participants fit the criteria.

After the 21 potential participants were interviewed, taking into consideration the above said criteria for selection, 14 eligible participants went through the screening phase. After briefing the participants about the study and explaining what the aims and objectives of the study were, details about commitment to the study and the amount of time and levels of participation needed from the participants were discussed with them individually. Consent

forms were given to all participants to read through. Only those who agreed to the procedure and the expected outcome were included. The screening tools helped check the general health of the participant and also their level of dependence on nicotine. Looking at the logistics and time needed as an investment, 12 participants were willing to be part of the process.

Screening tools

The following tools were used for screening the participants.

- General health questionnaire, 28 item version (Goldberg, 1978)
- The Fagerstrom Test for Nicotine Dependence (FTND) (Heatherton, Kozlowski, Frecker, & Fagerstrom, 1991).

Sample

The final sample consisted of eight working women. Embedded research design, as explained by Creswell, (Creswell, 2009) could have a minimum of eight participants to show optimum results. Participants were at the active stage at the time of joining and the intervention may help in maintenance. According to Mindfulness-based relapse prevention, (Bowen, Chawla, Marlatt, 2011) groups of six to 12 members make the best for such intervention. Hence with this sample, the study commenced. The objective of the research being to capture the experiences of the participants , hence control group was not considered. The qualitative findings helped reach the objective of the study while the quantitative findings adds support to the themes along with the existing literature. Qualitative data can act as a support to quantitative data (Jayaratne, 1993) Control group can be used in a mixed method design when the quantitative findings of larger groups are supplemented with in depth qualitative interviews on smaller groups (Creswell, & Clark, 2007) which is not the case in this study . Other mixed method studies have used similar uncontrolled studies in mindfulness (Finucane & Mercer, 2006; Alexander &Tatum, 2014; Eyles, Leydon,

Hoffman, Copson, Prescott, & Lewith, 2014; Racey, Fox, Berry, Blockley, Longridge, Janssens, Kuyken & ford, 2018).

Tools

Three semi-structured interviews were conducted for data collection, one before the intervention, one mid intervention and one post-intervention. Questions in the interview were structured to check the participants' smoking experiences, their experience during the intervention and their experiences post the eight-week intervention.

Having looked into and analyzed previous qualitative researches on MBRP the researcher came up with three sets of interview scales for each part of the study. The interviews were then given to four expert validators to validate, one expert specialized in therapy for addiction, one from the department of psycho-oncology, one specialist in the field of smoking cessation and one mindfulness expert. The aim and objective of the study with a brief description of the study as well and theoretical background was sent along with the three interview guides for validation. With a review of the feedback, the original set of questions were looked into and retained.

The following tools were used for the collection of quantitative data. After the first set of interviews were completed, the participants were administered the tools for the pre-tests. The pre-tests conducted were used as the baseline on which the effectiveness of the intervention was checked. Post-tests conducted after the intervention was complete showed differences in scores. Participants were also asked to rate their levels of craving on a scale of one to 10, one being low levels of craving and 10 being the highest level of craving before and after the intervention.

- The smoking abstinence self-efficacy questionnaire (Spek, Lemmens, Chatrou, Van Kempen, Pouwer, & Pop, 2012)
- Mindful Attention Awareness Scale (MAAS) (Brown & Ryan, 2003).

- Perceived stress scale (Sheldon Cohen, 1994)

These tools were administered to check the following.

- Whether there is a difference seen in the smoking abstinence self-efficacy scores of the participant before and after the intervention
- Whether there is a difference seen in the levels of mindfulness of the participant before and after mindfulness intervention.
- Whether there is a difference seen in the level of perceived of the participant before and after the intervention.

Intervention

Mindfulness-based relapse prevention therapy is an eight-week relapse prevention program that was developed combining strategies used in two different therapies namely mindfulness-based cognitive behaviour therapy and mindfulness-based stress reduction therapy. It was developed by Bowen, Chawla, & Marlatt (2011). The therapy was carried out over eight weeks, one two-hour session a week. Group-based therapy was given to all participants. Sessions were conducted as per the manual, focusing only on smoking relapse prevention.

Table 3.1

Sessions in Mindfulness-based relapse prevention

Session	Session title with description
Session I	Automatic pilot and relapse
Session II	Awareness of triggers and craving
Session III	Mindfulness in daily life
Session IV	Mindfulness in high-risk situations
Session V	Acceptance and skillful action

Session VI	Seeing thoughts as thoughts
Session VII	Self-care and lifestyle balance
Session VIII	Social support and continuing practice

Data collection process

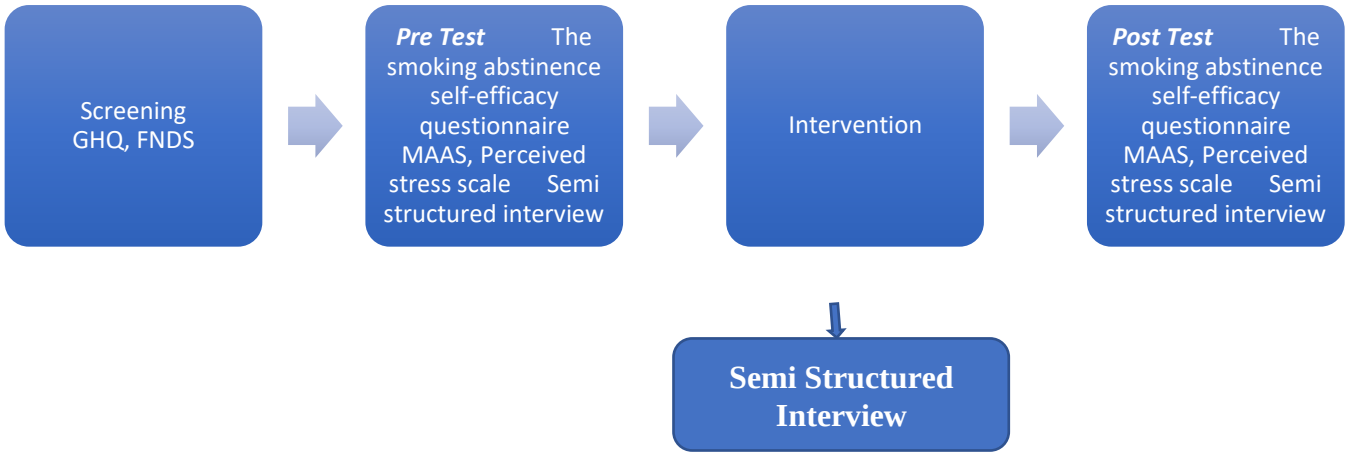

Screening
GHQ, FNDS
Pre Test The smoking abstinence self-efficacy questionnaire MAAS, Perceived stress scale Semi structured interview
Intervention
Post Test The smoking abstinence self-efficacy questionnaire MAAS, Perceived stress scale Semi structured interview
Semi Structured Interview

Figure 3.1: Data collection process

Pre-test.

In the pre-test an interview was conducted to check the experiences of the participant, when she smoked, how smoking emerged into becoming a habit, need for the participant wanting to quit, whether she had tried any previous quit attempts, and check what smoking did for the participant. This interview was intended to give a deeper understanding of the participant's world of dependence, the triggers that the participant thought were the reason for continued smoking, and the reasons why there were no successful self-quit attempts in the past if any. The information got from this stage was used by the researcher to understand the participants' world, and the reasons for them wanting to be part of the program.

After the interview was complete, the participants were administered the quantitative scales. The pre-tests acted as a baseline on which the effectiveness of the intervention was checked. It helped in finding the level of smoking abstinence self- efficacy of the

participants, mindfulness levels of the participants, the stress levels of the participants, and the level of cravings.

Mid intervention interview.

A semi-structured interview was administered four weeks into the eight weeks' intervention process to understand the experiences of the participants and to validate their progress in the program. The results from this helped the researcher understand the experience of the participant, the kind of changes seen in the participants, their understanding of the intervention, and check the progress made by the participant through the program.

Post-test.

The qualitative interview looked at the experiences of the participants through the intervention. Changes felt in the participants through the eight weeks were explored. The participants' ideas of relapse and their techniques to overcome situations where relapse was seen as a possibility, were interviewed. The post-test helped in understanding the complete experiential learning in the participants and seeing how MBRP worked amongst nicotine-dependent working women. Along with the interviews the quantitative scales were administered on the participants.

Follow up

Follow up was done through telephonic conversations where the participants were asked whether they continued practising mindfulness. The follow-up calls were made at one week, one month, and six months post-intervention. The main objective of the follow-up was to check if the participants continued to practise mindfulness and following what was taught during the intervention. It also checked whether the participants abstained from smoking.

Data Analysis

Qualitative data.

To interpret the interviews during all three phases of the study thematic analysis was used. By using this method one can understand the perspectives of different participants and also can bring about similarities or differences in their experiences (King,2004), (Nowell, Norris, White, & Moules, 2017).

For the purpose of understanding lived experiences, participants perspectives, behaviour practices including understanding of a process how it works thematic analysis can be used (Braun, 2013). Using thematic analysis one can integrate findings to existing theoretical data. It is also an inductive and data driven and works by adding enquiry to the qualitative element of the study (Allan, Bromlay, Kuyken & Sonnenberg, 2009).

The thematic analysis helps in encoding qualitative data into explicit codes. By way of coding, various clusters of themes are formed.

This analysis was used to examine and record patterns in the interviews, and hence understand the experiences of the participants. The interviews were recorded with the permission of the participants. Memos were created of all the information received during sessions and interviews. Member checks were done during the interview to validate the participant's responses. This was done by the researcher by restating responses and summarizing the same during the interviews. The recorded interviews were played back by the researcher over again until the researcher was familiar with each interview. The interviews were transcribed by the researcher and were cross-checked by another transcriber and validated by the supervisor. The researcher then read and reread the interviews of each participant in detail until she got fully familiarized with the interviews. The transcripts were then sent to a coder, who then went through a similar process of going through the transcripts

to develop codes. Coding was done by the researcher and an expert in qualitative coding, and the resulting themes that emerged were compared. A comparison of themes that emerged from the two coders was done. Inter- relater reliability was done for such a comparison. Validation of the same was done by the supervisor and kappa value was determined. Journals for each participant was maintained where participation for each session was recorded. Peer reflections was carried out where a peer critically reviewed the sessions and final reports. Supervisor reflections was also conducted where inputs on sessions, transcripts and final reports were received. The final report included themes that emerged from the interviews.

Quantitative data.

After obtaining results through the questionnaires, normality for the data was checked using Shapiro- Wilk test for normality.The data in the research being normally distributed paired sample t test could be carried out. This was used to check whether or not the mean values of the pre-test scores differed from those of the post-test scores, thus seeing if there was a significance in the differences or not. Paired sample t test is recommended for small sample size (de Winter, 2013). Paired sample t test could be used on samples less than 30 (Anthony & Joseph, 2014).

Once the pre-test was administered, the questionnaires were scored and results for each concluded. The mean values of the scores for the group were calculated. The post-test was conducted in the third phase of the study post the intervention, using the same tools as used in the pre-test. Scores for each participant was calculated using the scoring key of each tool. No changes were made in any of the tests administered. The final scores of each tool were then entered into Microsoft excel. Using SPSS version 18.0.2, the mean values were then derived at and a paired sample t-test was run. Results got were then tabulated and presented in chapter four.

Triangulation of results was determined using the convergence model (Creswell & Clark, 2007) where the quantitative and qualitative data results were analyzed, comparisons and contrasts made and final interpretation developed.

Trainings attended by the researcher

The researcher trained in various areas of mindfulness, including attending a 11-day vipassana course, two mindfulness based cognitive behaviour therapy courses, a mindfulness based stress reduction course, a mindfulness based relapse prevention course has attended courses and workshops on mindfulness and underwent a three month supervised training as an intern in a de addiction center where mindfulness was integrated in their line of treatment.

Ethical consideration

To adhere to general ethical guidelines the following ethical considerations were administered. The respect and dignity of every participant was a priority through the research and not compromised at any time through the research.

- The participants who were looking for alternative therapies for the prevention of relapse after quitting on their own and not looking for rehab/deaddiction centres for therapy were considered.
- Initial screening before intake included a detailed explanation of the intervention and its purpose, including information on the purpose of the research and the commitment levels needed. Only those participants who were comfortable with the process were included. In case addictive behaviour was noticed during screening referrals to the nearest professional was made. The group of participants included in the study did not come under the spectrum of addiction.
- Informed consent was got from all eligible participants. Emergency counsellors details were included in the consent form for the participant's safety.

- Participants were free to leave the research at any point in time if they felt uncomfortable.
- All data collected were recorded and analysed as per the general norms of research. Hence no data was misrepresented nor was there any bias in the findings.
- Every session during the course of the intervention included a debriefing with the participants. Thus all emotional issues or difficulties faced were addressed every week with the participants during the study.

Chapter 4

Results

This chapter provides the demographic information of participants, followed by the results. This chapter provides the emergent themes, utilizing direct quotations from the participant's interview transcripts in order to illustrate participant's core experiences of the intervention and the outcomes thereafter. It also discusses the quantitative results derived from the mean values of the tests administered.

Description of participants

Recruitment of participants took place by the researcher sending out information regarding the research via social media groups. The participants were chosen using purposive sampling after considering the inclusion and exclusion criteria and willingness to participate. All participants were women who were active cigarette consumers and working in different sectors who wanted to quit smoking and take up alternate therapy in order to prevent relapse. All participants were willing to participate in the eight week MBRP intervention, attending a two hour weekly group session for the same. At the time of intake, all participants were given a brief understanding about the research programme and the goals and method were discussed in detail. Consent forms were given and permissions got from all participants.

Demographics. Table 1 provides information regarding the eight participants . The table includes the assigned participants numbers, age, marital status, occupation, length of time consuming cigarettes, number of cigarettes consumed per day and current status of cigarette consumption.

Table 4.1

Socio demographic information of the participants.

Participant Number	Age	Occupation	Marital Status	Place	Length of Cigarette Consumption (in years)	No of cigarettes consumed per day
P1	32	Personal Assistant	Divorcee	Bangalore	9	11-pack
P2	35	Producer	Married	Bangalore	15	10-13
P3	37	Assistant Manager-HR	Married with child	Bangalore	11	10-15
P4	34	Sales and marketing associate	Married	Bangalore	3	8-12
P5	44	Soft skills trainer	Married with child	Bangalore	20	10-15
P6	34	Animal trainer and groomer	Unmarried	Bangalore	12	11-pack
P7	27	Junior project manager-IT	Unmarried	Bangalore	6	10-15
P8	28	Team lead-BPO	Unmarried	Bangalore	10	10-12

The group consisted of eight participants between the ages of 27 and 44 years. The mean age of the group was 33.88 years . Four of the participants were married out of which two participants had children and one was married recently. Three of the participants were unmarried. One of the eight participants was married and went through a separation. The mean number of years the participants smoked was 12.29 years. The average number of cigarettes consumed daily amongst the group members before them quitting was 10-15 cigarettes per day.

Process of analysis

The qualitative interviews were analysed using thematic analysis. Thematic analysis helps in encoding qualitative data into explicit codes. By way of coding various clusters of themes are formed. Themes are basic patterns found from the interviews that are conducted in the Qualitative part of the research(Boyatzis, 1998).

This analysis was used in order to examine and record patterns in the interviews and hence understand the experiences of the participants . The interviews were recorded with permission of the participants. The recorded interviews were played back by the researcher over again till the researcher was familiar with each interview. The interviews were transcribed by the researcher and were cross checked by another transcriber and validated by the supervisor. The researcher then read and reread the interviews of each participant in details till she got fully familiarized with the interviews. The transcripts were then sent to a coder who then went through a similar process of going through the transcripts to develop codes. Coding was done by the researcher and an expert in qualitative coding and resulting themes that emerged were compared. Inter- relater reliability was done and the kappa value that emerged was 73 percent which is seen to be high. Validation of the same was done by

the supervisor. Basic themes, organizing themes and global themes that emerged were recorded and appropriate verbatim included which is seen in the chapter.

The quantitative data was analysed using SPSS version 18.0.2. The pre and post test results were analysed using paired sample t test and results got has been recorded in this chapter.

Discussion on the qualitative interviews

Since in this research MBRP was used for the first time on working women who were looking for alternate therapies to enhance their health and prevent relapse post quitting cigarette smoking embedded research seemed most appropriate. This research design provided the researcher the opportunity to interview the participants on their experiences before the start of the intervention, during the middle of the intervention and post the completion of the intervention. The interviews were used to capture the prior smoking experiences of the participants, the experiences during the intervention and post completion once all the skills were imparted.

The analysis of these three interviews are captured in table 4.3, 4.4 and 4.5. Separate global, organizing and basic themes emerged from the interviews.

In the pre test interview one global theme, four organizing themes and eight basic themes emerged.

1. **Experiences before intervention:**

In the first interview that was conducted before the start of the intervention one global theme, four organizing themes and eight basic themes emerged which have been explained below.

Table 4.2

Experiences of working women on their smoking behaviour

Global Theme	Organizing Theme	Basic Theme
1. Experiences with the smoking habit	1.1 Smoking initiation	1.1.1 Why did I start?
		1.1.2 Affective states during the first experience
	1.2 Reasons for smoking	1.2.1 Emotional regulation
		1.2.2 Stress reduction
		1.2.3 Social acceptance
		1.2.4 Influence of family and peers
	1.3 Transforming through the habit.	1.3.1 Personal transformation
		1.3.2 Professional transformations.
		1.3.3 Transforming ideologies.
		1.3.4 Evolving commitment to health and personal growth
	1.4 History of abstinence	1.4.1 Preceding details of relapse
		1.4.2 Mode

The first global theme that had emerged from the interview was the experience of the participants with the habit of smoking. Their experiences were narrated with the reasons for initiation and details of the experience, how the idea of smoking transformed over a period of time and their past attempts with abstinence. Generally, the first experience smoking is said to create a sense of arousal (Bum, 1968). This aroused affect

when reduced causes deprivation and hence creates a dependency for the feeling over a period of time. (Firth, 1971).

1.1 Smoking initiation

Smoking experiences reported by the participants, especially during their first experience were mostly in a social setting. Research states that around 51.6 percent of research participants reported to have received their first cigarette from friends. Quarter of the population at 25.8 percent reported to have secretly taken or even stolen their first cigarette from someone close like a parent or a family member or even a friend (Klein, Sterk, & Elifson, 2013). More participants spoke of their experience being more negative than positive. Studies show that almost 50.7 percent of the participants having negative experience like dizziness (66.9 percent) , dislike in taste (53.7 percent) and coughing (77.9 percent) . Though reports of the experience being negative around 77.9 percent of the population reported to have felt a sense of calmness and relaxation after their first experience smoking (Klein, Sterk, & Elifson, 2013).

*1.1.1 Why did I start?***.** Smoking experiences may differ between individuals. The first experience for many were in a social setting with company. Details of the first experience included the *situation, venue and age* of the participants. Out of the eight participants in the research, seven reported that they were with someone when they had their first experience with a cigarette. Four participants out of eight in the group were with their friends, one participant reported being with her brothers' friend, one reported to have smoked her first cigarette with her cousin. This theme brought about understanding of the participants first experience consuming a cigarette. Most participants narrated their first experience being negative.

Participants experienced their first cigarette with friends from different parts of their life. Some participants had their first experience just out of school, some when they were in

college. But in all situations the experience was with other people who knew how to smoke or wanted to experience it the first time. P2 and P4 had their first experience in a work atmosphere. P5 had her first experience with her cousin. “My cousin was actually smoking. I said let me try this and I took it up.” (P5, personal communication, Jan 2019) .She being with a family member wanted to experience it and hence took it up. Family according to research could act as an influencer for wanting to smoke (NCIB, 2010). When it came to where the participants first experience with a cigarette took place almost all but one experienced their first smoke outside of home. Away from parents.

When it came to age there was a wider age range with respect to having their first experience with a cigarette. P6 was seen to be the youngest. She reported to have been around 14 or 15 years. “I was actually really young at that age. “I would have been around 14 or 15.” (P6, personal communication, Jan 2019). Other participants responded that they were in their teens too, but at the age of 17 to 19. Some of the participants were in their early 20’s when they had their first experience with a cigarette.

Negative case analysis for the basic theme - details of initiation. While all participants reported to have smoked with someone at the time of their first experience P3 reported to have smoked all alone. She reported locking herself in the bathroom and trying out how it was to have a cigarette.

The participant was not sure if she would want to smoke on a regular basis and did not want to try it with friends until she was sure she liked what she experienced. This experience does not go with research findings where results show that normally the first experience of consuming a cigarette is with company (NCIB, 2010). This may have been due to the fact that the participant was brought up in a scenario where girls were not expected to indulge in such habits and she was afraid that in case she smoked with friends her family

would come to know of it. Hence wanting to experience what it felt like but not be judged for doing so she decided to smoke alone.

*1.1.2 Affective states during the first experience***.** There are various feelings and emotions that individuals go through before they take up any activity for the first time. It is the same with smoking. During the first experience many participants reported negative effects. The first experience for participants were not very positive. P6 narrated coughing and feeling dizzy. P3 stated she did not like the experience at all. P4 did not know how to explain the feeling but then said she felt different. Studies show that 50.7 percent of the participants included reported more negative experiences during their first attempt. 66.9 percent claimed to have felt dizzy (Klein, Sterk & Elifson, 2013)

P5 stated that she felt good when she smoked the first time. She was at an emotionally vulnerable space and she claimed that the cigarette helped her cope emotionally though she felt physical discomfort it seemed irrelevant as the cigarette had put her in a better place emotionally

After smoking participants felt positive. Some reported experiencing a sense of calmness and relaxation. Some of them who tried to smoke when they were in college reported to have felt calmer that they were not the centre of attention anymore. P7 felt good for having experienced something new. One participant stated it made her feel so good that she wanted to try it out again.

Some individuals may just act and not think of consequences. Some of the participants did not think much before picking up their first cigarette. P1 stated that she did not think anything before her first attempt. As stated by her **"**(I thought) Nothing. They asked me to smoke and I smoked." (P1, personal communication, Jan 2019).

When it came to P2 her thoughts were that a cigarette would help her reduce her stress and hence she wanted to give it a chance to see if it would work. While she reported

during her first experience she was in a daze trying to figure out how to actually smoke after her first attempt she reported that she was ready to have her next one, thus blunting out her negative effects and thinking of the positive way the cigarette made her feel.

Expert opinions show that when individuals experience nicotine for the first time they may not like it unlike other addictive drugs where consumers usually say that they enjoy the feeling and want to try it again. Addiction happens over time and not immediately (Murphy, 2016). The physical experience of smoking was not pleasurable for the participants. But their emotional want for it superseded the physical pain which they got used to over a short span of time thus increasing the usage.

By understanding the thoughts and feelings of the participants when they first started smoking, the researcher could understand how the feelings about smoking had transitioned for participants over time and hence use it to break the monotony of smoking during the intervention.

1.2 Reasons for smoking

The main reasons for smoking was to manage stress, emotionally vulnerable states, to be accepted socially as well as influence of peers and family. Research showed that personal factors such as self image and societal factors such as easy access to cigarettes could also be a cause (Institute of Medicine, 2009). Other research found that influences could range from sociodemographic factors, environmental factors, behavioural factors, personal factors amongst others (National Center for Chronic Disease Prevention and Health Promotion, 2012). Stress, emotional instability, peer pressure were seen as the main reasons for the participants starting to smoke.

1.2.1 Emotional regulation. It was seen that the main influences that triggered the participants to smoking were emotional in nature. Studies showed that various negative and positive emotional states and situations could act as key influences to start and continue

smoking. Early smoking experiences were seen to emerge from situations cigarette consumers were in, access to the product and varied emotional states (Johnston, Westphal, Earnshaw, & Thomas, 2012). Emotional states such as feeling bored, sad, angry or stressed acts as triggers (Webmed, 2019). Smoking is seen to increase when individuals are especially emotionally vulnerable. Some of the participants narrated that they wanted to smoke when they were stressed and smoking would calm them down. P5 smoked to ease her nerves.

> "I think I was undergoing some personal problems. actually emotionally in a very different state." (P5, personal communication, Jan 2019).

She said when she was in an emotional state, that's when she started smoking. She felt good when she smoked and it continued when she was stressed. P6 also stated she smoked when she was stressed and felt too much pressure. P1 described how she started smoking again once she had a negative situation in her life and was going through a divorce.

> " It was the year I separated from my husband and I was living alone and there was a lot of loneliness around and just kept me company. Something to do." (P1, personal communication, Jan 2019).

Researches done showed that emotional states result in reduced levels of physical health where smoking habits are seen to increase (Salovey, Rothman, Detweiler, & Steward, 2000) . Emotional states such as feeling bored, sad, angry or stressed acts as triggers (Webmed, 2019).

" I've always been positive about smoking. In the sense, when I take it up, I really feel good. When I smoke I really feel good. It's definitely put me in a positive frame of mind. It's always been that. "(P5, personal communication, Jan 2019).

When making age comparisons those participants who were in their 20's did not talk about emotional regulation being a major factor as that of the participants in their late 30's and 40's.

1.2.2. Stress reduction. For some participants it was the situation that made them want to smoke. Being exposed to an emotional or stressful situation. Participants mostly reported to have indulged in smoking when they were stressed hence the feeling that came upon them was a feeling of relaxation and soon became a need.

> "I started smoking when I was stressed. It became a cycle . so whenever I was stressed I would take to a smoke. And then it became even when I was relaxed. So there were two times when I used to smoke, one was when I was relaxed and the other was when I was stressed. So that was kind of the pattern." (P4, personal communication, Jan 2019)

> "It's just like a mania .That's what I feel. but people say and I also say it's just a stress free you know. When you smoke it just diverts you from whatever you do for few minutes and you know we keep our things away and we don't think about those any particular things". (P6, personal communication, Jan 2019)

For P5 the level of relaxation that she got from smoking she equated to the feeling she got when she spoke with God. "I think the closest feeling I can get when I'm not smoking is when I pray." (P5, personal communication, Jan 2019).

Just like the findings in this study in previous research studies also it was seen that participants perceived cigarettes as being essential for the body and brought about a lot of pleasure and relaxation (Ebrahim, Sahebihangh, Ghofranipour & Tabrizi, 2014).

Stress was brought into the foreground as a reason for smoking irrespective of age or professional background of the participant.

1.2.3 Social acceptance. Participants also smoked to fit in and be accepted socially. Th idea of looking 'COOL' made certain participants want to smoke. For one participant P2, interacting with a group of boys at work, she being the only female necessitated her to smoke in order to look cool and fit in. She felt good post her first attempt

and wanted to do it again. Social acceptance was seen as a need to smoke more among the younger group of participants, especially the participants who were unmarried.

1.2.4 Influence of family and peers. Most individual cigarette consumers are seen to indulge in the habit socially seeing their peers. For most participants the influencing factor for them to start smoking were their friends. Though they stated that their friends did not force them to smoke they were with friends when they smoked. Even P3 who was not with friends when she smoked she stated that all her friends smoked and she was curious because of that to understand what all the excitement was about when it came to smoking . For P1 she stated that she did not want to smoke but due to peer pressure she tried it out. With other participants like P7 and P8 who were with a group of friends when they smoked , reported that they wanted to experience something new with their friends and hence started smoking.

> "I smoke when I am with people. Vary rarely do I smoke alone. May be when I get the smell or when the weather is amazing. Otherwise not so much." (P2, personal communication, Jan 2019).

> "Having the guys around was more of a thrill to show off like oh you know what its not like only you guys can smoke I can smoke too duh!!" (P2, personal communication, Jan 2019).

Studies show that smoking initiation was mostly influenced by peer behaviour. Most teenagers were seen to get influenced through norms and behaviour amongst their social groups (Johnston, Westphal, Earnshaw, Thomas, 2012). Peer influence was seen to be the biggest reason for the participants indulging in the habit. They were also one of the major reasons for relapse amongst the participants.

Observing family members smoke also acts like a trigger or an influencing factor for the act of smoking to develop into a habit. For certain participants like P5 , she was

with family when she smoked first. Her cousin introduced her to smoking. With respect to P6 she was with her brother when she started smoking.

> "My cousin didn't say 'c'mon have a smoke'. No, he didn't do that. He was having a smoke, and I was there with him. So I said just let me try this. So, that's how I got into the thing." (P5, personal communication, Jan 2019).

Though family was not of direct influence to the habit, them having smoked had been a motivator . Studies show that many indigenous participants experienced their first cigarette with relatives usually siblings or cousins who were at times their age or older. They even played key roles in providing instructions on the smoking technique (Johnston, Westphal, Earnshaw, Thomas, 2012)

1.3 Transforming through the habit.

The third organizing theme that emerged from the interviews before the intervention was the transformation seen in the participants due to the habit. Through the smoking years different effects were noticed by the participants. Those participants who were three to four years into the habit noticed different changes when compared to the participants who had been smoking for 15 years and more. Physical as well as psychological effects were noticed and reported. Professional changes and changes in ideology was witnessed. Nicotine addiction in studies had proved to have influence on individuals performance, stress levels and others . Some individuals were seen to have changes in health conditions, focus, temperament and reduced stress levels (Heishman,1999).

1.3.1 Personal transformation. Various changes were noticed by the participants over a period of time on a personal level. From changes in the physical look to behavioural and cognitive changes , the changes were not processed by the participant immediately but over a period of time . Lifestyle changes were also noticed apart from major degreases in participants health. Research show that nicotine enhances finger tapping, focus

and enhanced attention reasoning etc (Heishman, 1999) Hence individuals feel these positive changes are for the best.

Researches show a change in the thoughts do occur about the act of smoking in habitual smokers. These thoughts may not have the best predictive powers for quitting (Li, Borland, Fong, et al, 2015). The longer the smoking experience the harder it would be to want to quit as thoughts about the act change. The participants over time did get used to the habit and all inhibitions if any from the first attempt had broken. Feelings of shame or guilt had passed and acceptance had settled in.

When it came to emotions there were responses to how positive smoking made the participants feel.

When it came to behaviour most participants saw changes over a period of time if they did not get to smoke when they wanted to. Some showed changes such as banging on the desk which was similar to research which stated that finger tapping increased with increase of nicotine in individuals (Heishman, 1999).

Research showed that cigarette smoking was seen to be strongly associated with increased levels of behavioural problems. (Giannakopoulos, Tzavara, Dimitrakaki, Kolaitis, Rotsika and Tountas , 2010). Other research shows that behaviours like finger tapping, banging on the desk etc increases amongst habitual cigarette smokers (Heishman, 1999). Participants were able to notice changes in their behaviour both positive and negative changes which were not directly affecting their day to day activities but did have a cumulative effect on their overall mood.

Some participants reported to have reduced the number of cigarettes consumed over the years Research showed that individuals with nicotine addiction who were unable to give up the habit were seen to try and reduce their per day consumption of cigarettes over a period of time (Yong, Borland, Thrasher, Thompson, 2012). For some participants the

experimentation stage had passed and a habit had developed hence their smoking intensity reduced over a period of time and with age. Other participants had developed a resistance to the effects of cigarettes and hence consumption increased over a period of time.

Participants who indulged in the habit of smoking reported to have a more clear mind after smoking, they were able to think more clearly , smoking helped them come up with better ideas and solve problems faster. As reported P5 stated that she was able to make better decisions and come up with better ideas after having a cigarette.

Studies have shown that smoking had said to increase levels of rationality, ideation and other aspects which help promotive cognitions (Heishman, 1999). With the break taken to smoke participants felt more energized and clear minded. This gave them a form of positive reinforcement to indulge in the habit.

Some of the participants did not seem to believe that smoking was effecting their life style in anyway. They stated it being of no problem and they can stop anytime. Though participants stated this they were still not confident enough to quit on their own and hence were seeing assistance.

When it came to the participants personal lives they seemed to connect the effect smoking had on their personal lives directly to the effect it had on their health. The participants who made such connections had reported not being able to perform as they used to because of their health deteriorating. Studies conducted proved this to be true as smoking behaviour in individuals was seen to reduce endurance levels both in the cardiorespiratory as well muscular areas (Conway & Cronan, 1992).

1.3.2 Professional transformation. When it came to participants professional life, it was seen that smoking had an influence on how they were able to work. As much as cigarette consumption was seen to alleviate stress during situations at work, participants did notice that if they did not have thoughts about cigarettes as much, or mood changes due to not smoking

they would be able to concentrate more on work. Research studies also show that cigarette consumption has been seen to reduce quality of work in the organization and create an unstable work life for the consumers (Baker, Flores, Zou, Bruno, & Harrison, 2017).

For certain participants there seemed to be no changes felt in their professional life. Some of the participants reflected that they could have spent more time on work if they took less smoke breaks. Research studies show that cigarette smoking has seen to effect professional life. Cigarette smoking has seen to effect attendance at work and also result in work and activity impairment (Baker, Flores, Zou, Bruno, & Harrison, 2017). And with the participants noticing the same where though they felt calmer and felt more rational post smoking, they saw that smoking affected their breaks at work as well as their temperaments and levels of concentration.

1.3.3 Transforming ideologies. Some participants narrated that their idea of smoking had changed. They may have felt guilty at the start but over time their guilt had disappeared and they had accepted the habit as it is. There was no feeling of shame as a woman who smoked. P2 reported wanting to be as cool as the boys thus showing no feeling of shame as a woman smoking. P3 did not want to show anyone she smoked at first but later started smoking with her friends in social settings .

1.3.4 Evolving commitment to health and personal growth.

All participants wanted to get healthy as they knew that smoking was going to cause them health problems if it had not started already like with P1 who stated that she had wheezing and felt breathless at times.

Studies in the past showed that apart from other reasons such as smoking bans in particular areas, news about pregnancies etc, the main reason for individuals to be motivated to quit was their concern for their health (Buczkowski, Marcinowicz, Czachowski, Piszczek,

2014). All participants saw a deterioration in their health at some level and at this point of time wanted to quit for good to work on their health.

Some participants narrated how they wanted to get their life in order and hence wanted to live better with no attachments to cigarettes.

Studies show that smoking cessation is associated with improved positive mood and quality of life and reduced levels of stress and anxiety thus promoting mental health (Taylor, McNeill, Girling, Farley, Hawley & Aveyard, 2014).

Those participants with families were more keen on getting healthy. Participants who had children had more positive views on wanting to get healthy.

1.4 History of abstinence.

The fourth organizing theme that emerged was attempts made to quit smoking. For most participants quitting the habit was easy but staying away from cigarettes for longer periods of time was difficult. Those who tried quit attempts in the past always seemed to relapse within days of cessation. Research showed motivators to quit smoking were varied . 66 percent of the participants in a research reported that pictorial warnings were a reason for them wanting to quit. Other studies show that high nicotine dependent individuals find it harder to quit smoking (Hessami, Sharifi, Masjedi, 2014) .

1.4.1. Preceding details of relapse. Studies show that young adults and those individuals with lower levels of dependency on nicotine are more likely to try spontaneous quit attempts (Ling & Glantz, 2004) Almost all of the participants tried a number of quit attempts on their own. Most did not survive more than two days after which they went back to cigarettes but the sample also had participants who had quit unaided during pregnancy and relapsed years after. Studies showed that relapse rates are high amongst self-quitters at an alarming level of 95 percent probability of relapse (Garvey, Bliss, Hitchcock,

Heinold, Rosner, 1992). All eight participants reported either tying to quit or reducing the number of cigarettes they consumed on a daily basis.

1.4.2 Mode. When it came to spontaneous quit attempts almost all participants tried to quit sometime in the past. Relapse rates were seen to be high amongst self quitters (Garvey, Bliss, Hitchcock, Heinold, Rosner, 1992).

Some participants like P5 used substitutes to help refrain from relapsing. P5 stated that she found it very difficult to stay away from cigarettes for longer periods of time. Though she tried quitting multiple times in the past she always fell back. She had tried various substitutes like candy or gum but she claimed that sweets cause diabetes and the nicotine gum caused her throat to hurt.

P3 narrated how she quit when she was pregnant and at that time how she had no choice to smoke so she did not. Couple of years after her delivery she relapsed when she had moved jobs and had her own space to do what she pleased. She also stated the job being stressful that could have been the cause for relapse.

P6 relapsed not many days after her quit attempts . P2 described how the company she kept was a great influence on her smoking behaviour and how she relapses most of the time because of social pressure. When self-efficacy for abstinence is low then chances of relapse are seen to be high. In the quantitative part of phase one it was seen that the self-efficacy of the participants was low thus increasing chances of relapse especially when trying to quit by self.

Research shows that with self quit attempts the percentage of successes increase the longer the individual stays off cigarettes from a mere 12 percent success rate at one month to a good 95 percent success rate at one year (Gilpin, Pierce, Farkas, 1997). Though the modes of quitting had differed between participants quitting attempts did not sustain long enough to reach success in relapse prevention.

2.Experiences mid intervention

In the second interview that was conducted in the middle of the intervention post the fourth session, one global theme, two organizing themes and eight basic themes emerged which have been explained below.

Table 4.3

Experiences of working women during MBRP intervention

Global Theme	Organizing Theme	Basic Theme
2. Experiences with MBRP and mindful practise	2.1 Impactful components within self	2.1.1 Being in the present
		2.1.2 Reflection on breathing
		2.1.3 Trigger identification
		2.1.4 Understanding cravings
		2.1.5 Changes in thought, emotions and behaviour.
		2.1.6 Awareness of self
		2.1.7 Pausing
		2.1.8 Changes in reaction time(auto pilot)
	2.2 Supporting outcomes of practise	2.2.1 Changes in family and relationships
		2.2.2 Changes at work
		2.2.3 Changes in social self
	2.3 Challenging experiences	2.2.1Mindful practice and exercise

The second global theme that emerged was experiences with MBRP and mindful practise .There were various positive changes seen within the participants that were impactful components in self. Other supporting outcomes were seen with family, professional

life and social settings. Mindfulness saw various positive effects on its practitioners. Research done in the area showed changes in the brains functioning in those practising mindfulness. MRI scans show reduced fear responses, feelings of pain, and overall feeling good in practitioners (Ireland, 2014) Studies show that mindful practise reduced stress, reduces emotional reactivity, practitioners are seen to have more cognitive flexibility, increases focus(Davis & Hayes, 2012). Participants reported that they felt changes after practising mindfulness for four weeks daily. Participants also narrated that the practise did not come without its set of challenges. The practise of mindfulness was difficult to cope with, though such challenges were discussed in the program.

2.1 Impactful components within self.

Daily practise of mindfulness was seen to have brought an impact in the self of the participants. Some participants found it harder to explain the changes they felt in words when compared to others. The changes ranged from within themselves, interactions in the family, professional settings and social settings. These changes, in turn, helped them from relapsing. Research studies done on the effects of mindfulness show that changes do take place in the practitioner which results in increased subjective wellbeing, reduced emotional reactivity and improved behavioural regulation (Keng, Smoski & Robins, 2011). Similar changes have been reported by the practitioners.

2.1.1 Being in the present. According to Zinn mindfulness was about being in the present while paying attention in a particular way non judgementally (Kabat-Zinn, 2010) Participants narrated how they have been more conscious about living in the moment. Some participants recalled exercises that were conducted during the programme and narrated how they were never mindful before but have changed their perspective on the same . P7 stated that after she went through with the raisin exercise she realized that she was never in the present moment when she tasted food. But having been in that moment she could recall

the taste of the raisin even during the interview. She also reported finding herself being more conscious, she was more aware of what was happening to her at specific moments. She was aware that her heart was beating a bit faster and her hands were wet during the interview.

> "I am more conscious I think. At least I am aware of what I am doing and when I am doing it. I cant say all the time. But at least more than I used to. Like even as we speak I can feel my hands sweaty and my heart is beating a little faster and I am aware of it." (P7, personal communication, March 2019).

For P3 she stated that when it came to not smoking concentrating on her feeling at that given moment especially during a craving served as a diversion from actually wanting to smoke.

> "Well I think me concentrating on how I feel at that moment sort of serves as a diversion." (P3, personal communication, March 2019).

Research using MBRP on individuals with substance abuse saw similar themes emerging where attention to present moment was reported (Haig, 2014).

2.1.2 Reflection on breathing. The practise of mindfulness teaches individuals to reflect on their breath. Participants reported that when they were in a high risk situation they turned to reflecting on their breath that made them feel less of the craving . P2 narrated how she would tie and again remember she was breathing and reflect on her in and out breath which was something new for her as she had never concentrated on her breath in the past.

> "Now and then I do when I remember to I reflect on how I breath in and breath out." (P2, personal communication, March 2019).

Various research done on MBRP practise showed similar themes come up where participants noted that concentrating on breath brought about a calming moment in their lives (Haig, 2014) . Participants were taught how to focus on their breath from the start of the

program. Focussing on breath is one of the main parts in mindfulness. Breath modulation is not indulged in but just merely focussing on one's breath is part of mindfulness. Hence participants being aware of their breath shows they understand the process of mindfulness.

2.1.3 Trigger identification. Smoking is seen to increase during social events. Participant P2 reported that she found her triggers to be the strongest when she was at a party with her friends where she and everyone else were drinking . She stated that the urges were strong but eventually died down.

> " I mean it's like when I'm out with my friends you know . that was how I actually relapsed before too . when everyone is smoking. Well the urge at times got strong. But it went away .And I was drinking so not fully mindful at that time." (P2, personal communication, March 2019).

Many participants narrated how work pressure were identified as triggers for wanting to smoke. This was seen to be more prominent amongst participants as work pressure was more a regular trigger that could have been identified more easily out of association. P8 narrated how she was able to identify that she craved for a cigarette after a meeting that was not very productive. She said if it has been before the intervention she would have definitely indulged in a cigarette . P4 also had triggers when she was at work which she was in the position to identify.

> "When I had a long meeting which was frustrating as it was not going well and nothing came out of two hours brain storming. I really was irritated and wished I could smoke after that meeting to relax. Normally I would have done it for sure." (P8, personal communication, March 2019).

Studies show that increase in work stress is seen to have an increase in health risk behaviour. Strong relationships were seen between work stress and increased levels of smoking and alcohol consumption (Siegrist & Rödel, 2006). Participants moved from

consuming cigarettes when under work pressure as seen in phase one to now understanding that work pressure does act as a trigger.

Stress is seen to generally increase risk behaviour in individuals. Before the intervention, the qualitative interview brought out basic themes where stressful situations were seen to be a cause for smoking. After four weeks of intervention participants were in a position to analyse and report having felt triggers when they were stressed . When analysing causes for individuals to smoke at the start of the programme many participants discussed how stress was a major cause for them wanting to smoke. Even if it was not noted as the strongest trigger participants did mention how stress acted as a trigger.

> "Any kind of stress made me think of wanting to smoke ." (P8, personal communication, March 2019).
>
> " I've thought about cigarettes a lot, mostly when I'm stressed. When the kids are making a noise or at work when I'm in a meeting or trying to concentrate and I can't . " (P8, personal communication, March 2019).

Research shows that cigarette consumers normally report that smoking helps in releasing stress. This was also seen in themes before the intervention where participants stated that smoking made them feel better in a stressful situation. Stress is seen to act as a trigger for individuals who would normally smoke to alleviate the same (Parrott, 1999). Hence it is only normal for participants to identify that stress is a trigger for smoking.

Urges or cravings was seen to be a trigger for thinking of a cigarette. P7 stated that she thought the urges were unpleasant and she just wanted it to pass. P5 stated that her urges made her feel irritable and spoilt her mood. She also stated that she could not think properly while she got these urges. Participants reported the urges being an unpleasant feeling that they did not wish to experience and wanted to pass quickly. Unlike before when

in Phase I, participants were able to identify these urges and not react to them . Identification of a craving as a craving and understanding what a craving does to the participant is part of the intervention process.

> " The urges were simply unpleasant. I am on the edge like waiting for it to go. " (P7, personal communication, March 2019).

Research studies on mindfulness and cravings show that mindfulness helps in identification and understanding of a craving. MBRP is seen to reduce levels of cravings (Witkiewitz, Katie, Bowen, Douglas, & Hsu, 2013) There is a transition seen in the participant being able to identify when they are getting a craving and also how to handle the same.

One of the other triggers that the participants were able to identify with were their thoughts about smoking or a cigarette. At times participants stated that their thoughts went on to a cigarette which did then act as a trigger for them feeling like they wanted to smoke. When it came to P3 as she was always alone and cigarettes relaxed her she stated that her thoughts went to the act of smoking mostly when she was alone.

> "When I was alone, because that was my temptation. When I had space to myself and I just wanted to relax but I could not smoke. " (P3, personal communication, March 2019).

Research studies show that various thoughts can trigger the need to smoke. When a nicotine dependent individual does not smoke thoughts about cigarettes are seen to come and go from time to time (Bricker, 2016). Mindfulness makes the practitioner attend to thoughts. Such thoughts are looked at as passing clouds. While attending to thoughts participants also were aware of thoughts about cigarettes. They were in a position to understand that the thoughts would pass hence not succumbing to the thought.

Participants also identified certain times of day that acted as triggers for them. Participants P6 narrated that she was able to identify specific times in a day when she would feel like smoking which she was unable to do before like after lunch or when the weather changed during the day or as soon as she finished a session with her animals. When compared to Phase I interviews a new trigger was identified as time of day. This could be because being mindful at different times of the day relieved to participants that there were specific times in a day that acted as triggers for wanting to smoke which they had not realized in the past.

> " I understood certain times of the day is a trigger. After lunch ill feel like smoking. Change in weather I feel like, after training session I feel. " (P6, personal communication, March 2019).

Research studies show that the time of day does influence smoking and also acts as a trigger to maintain the smoking habit. In the FTND questionnaire the time of first cigarette being the morning had the greatest validity amongst all the other measures. This proves that there is an influence that time has on triggering a smoking episode (Barker et.al, 2007) .The routine of the participants were broken through the intervention. Participants were accustomed to smoking at a particular time of the day as it happened to be a mindless routine in the past. Now participants were able to notice those times which acted as triggers. Triggers such as social situations were identified in the younger participants than with the older. Stress and habitual triggers were prominent in participants who were smoking longer.

2.1.4 Understanding craving. MBRP teaches participants through experiential learning to understand cravings. In the pre intervention interviews it was seen that the participants were unable to identify a craving as a craving . They did not notice that one of the reasons for them wanting to smoke was a craving. The quantitative means from the craving meter pre test also showed high levels of craving amongst the participants. Over the

four weeks with the trigger worksheet given to the participants, cravings and triggers were more easily identifiable. Participants like P8 were able to notice what their triggers were, like stress and how she developed a craving for wanting to smoke when she was stressed. Mindfulness has made participants try and understand their cravings better. Participant P4 stated that she never once tried to understand how a craving made her feel. But now she is in a position to do so.

> "I know when I am stressed it's a major trigger and I crave I need to analyze what triggers my stress. I understand I am on the edge and snappy when I stress, if I have a craving I now try and understand it better. Imagine you have some pain. hmmmm like a tooth pain and you are concentrating on the throb only that it subsides after a while. I think it's like that. I know I'll get back to work in a few minutes after the craving." (P8 personal communication, March 2019)

Research studies on MBRP show that individuals are able to understand their cravings better and not succumb to them by the end of eight weeks thus bringing down the levels of relapse (Haig, 2017). The exercises given in MBRP help participants to understand their cravings better and not respond to them immediately like they used to when in autopilot mode (Bowen, Chawla, & Marlatt, 2011). Cravings were better understood by participants as a physical urge for a cigarette. Triggers that made them want to indulge could also be understood better. All participants were able to understand their cravings which was more personal in nature. Intensity of cravings did not differ with age or profession or for any other reasons.

2.1.5 Changes in thought, emotion and behaviour. All participants reported a change in their thinking. Their change in thinking was interlinked with their behaviour and emotions.P2 stated that she analysed herself much more than she used to. She also stated that when she was stressed she used to tell herself to breath and remain calm. P1 and P3 stated

that they did not let negative thoughts take a hold on them. They did block them out but they acknowledged them and let them pass.

> "When I try to meditate, if a negative thought comes my way, I don't block it . I've always been a person to focus myself on thinking positive mainly. So, if I have some negative thoughts flow my way, I just try override them. But this has made me realize if I acknowledge the thought, it's enough for it to pass. I don't need to put more energy, per se, to block it out. Yeah, I guess that's what it is." (P3, personal communication, March 2019).

P1 stated that she was aware of not going into auto pilot. She was able to put ideas into compartments which made her process things more efficiently and work better.

> "But now with mindfulness being all about observing and not going into auto pilot as such that may help me stop when I am about to think what is coming next before I actually do it. I am able to compartmentalize better. I am able to analyze my thoughts better." (P1, personal communication, March 2019).

The main idea of mindfulness was non permanence where thoughts are treated as thoughts and like clouds as made to pass on . With MBRP participants are thought to not hold onto any feelings or thoughts which may be pleasant or unpleasant but to let them go. In other studies there was evidence that thoughts, emotions and behaviour were interlinked and changed using MBRP (Haig,2017). Participants through this process were more aware of what they were thinking. This could be due to the fact that the art of mindfulness makes practitioners aware of their thoughts by attending o them and letting them pass. Not holding on to a thought helps reduce holding onto persistent thoughts about smoking.

Participants narrated experiencing changes in their behaviour over a period of four weeks. Participants reported that they were able to understand how they behaved and

saw small changes in them. With thoughts and emotions having reported to change behaviour also was seen to change. The main behavioural change seen in all participants was that they did not smoke. Apart from not smoking participants reported others changes that they noticed. P1 stated that she reacted differently to things and is able to understand better. “I am understanding behaviour better.” (P6, personal communication, March 2019). P8 narrated how when a mosquito bit her she had changed her behaviour from killing it to now observing what a mosquito bite felt like. P6 stated that she was able to understand her behaviour better and hence alter it where and when necessary

> “Like now if a mosquito bites me I would immediately not scratch the area. Rather I tell myself hey this is unpleasant. And then scratch it.” (P8, personal communication, March 2019).

Research showed that there was an awareness of connection between physical sensations, emotions and thoughts in MBRP practitioners which concluded n behavioural changes (Haig, 2014). Mindfulness teaches practitioners to be aware. Thus being aware of gradual changes in behaviour is only natural in this case. Not reacting immediately to stimuli may result in changes in individuals behaviour.

The participant experienced changes in emotions. P1 stated that she did not react to negative things like she did in the past. P2 stated that if she did not smoke she did not feel as irritated as she used to. She did not let it get to her. She was able to stay calm. P3 stated that she was restless for immediate results in the beginning but started feeling much calmer in the middle though it took time.

> “Not smoking does not irritate me as much as it used to. I don’t let that stress get to me. I do tell myself you got to calm down.” (P2, personal communication, March 2019).

Qualitative studies on MBRP in different populations showed that emotional differentiation was possible (Haig, 2017), thus showing that such changes in emotions are possible with mindfulness training. Participants at the start were not able to identify their emotions. Mindfulness gives insight into what one is feeling emotionally. Participants started to notice their emotions and where in a better space in identifying their feelings by the fourth week.

2.1.6.Awareness of self. The main idea of mindfulness for practitioners was to increase self awareness. Mixed method studies on mindfulness showed that self awareness was a result of practising mindfulness (Matchim, 2010) . Participants described how they were more aware especially of their physical sensations. P8 reported how she is more aware of how she feels these days especially because she does not respond to situations immediately. Mindfulness exercises help in increasing awareness of sensations. From participants not commenting about their sensations in the start mindfulness has brought about this awareness where sensations have been brought to the attention of the participants . P3 stated that she was able to understand how she felt physically much better. Participants narrate that they were more in touch with themselves and would wait before reacting to an unpleasant sensation as they would have done before. The raisin exercise was helpful for some participants like P8 who started thinking beyond just the sensation of eating but also stated that she was never aware of what was going into her system but was getting more aware now.

> “I tell myself mentally what is it. If I am salivating more, if I feel warm, If I am getting irritated, I identify and then I tell myself oh this is not how I am feeling.” (P3 personal communication, March 2019)

Research studies in the field of mindfulness show that using body scan meditation focus is brought to individuals sensations, thus bringing about increased awareness of how

they are physically feeling (Bloise , Andrade, Machado , Andreoli, 2016). Body scan meditation is introduced in the first session of MBRP after which each week focus is given on bringing attention to one sense per week (Bowen, Chawla, & Marlatt, 2011). This in turn will help participants more aware of their sensations.

Research showed that practising mindfulness for longer periods had formed a new concept called the mindful self where there were seen to be enlightened views of self thus making individuals more aware of themselves (Xion, Yue, He, Yu, 2017) .Being more aware of oneself will help individuals look at themselves and their potential. Participants were able to understand what they were capable of withstanding by understanding themselves and being more self aware

2.1.7 Pausing. In the first session of MBRP participants are introduced to autopilot. The pre test scores showed mindfulness levels being low and interviews brought out the fact that individuals succumbed to triggers without any form of pausing, thus acting on auto pilot most of the time. From introducing mindfulness and the idea of being able to pause one of the personal implications brought out by the participants was the idea of pausing. Participants stated that unlike before they did not react immediately to cravings but paused to see what would happen and how it would feel. P5 stated that she was able to understand her feelings better because she did not react to things immediately anymore.

> "I am seeing things differently. Pausing before acting. its made be pause. I don't react I understand what I feel better and when your thinking about whats going in with your body and feeling at that moment you don't have time to think of what you are going to do next. So I guess im preoccupied thinking about how I feel that I don't negatively react." (P5 personal communication, March 2019)

The essence of mindfulness is to focus on bodily sensations but not to react immediately. The whole idea is to pause and not react to a feeling be it pleasant or

unpleasant. (Goneka, 1987). With the introduction to body scan meditation the participants have now learnt the art of pausing rather than reacting immediately to thoughts, feelings, emotions or situations.

1.1.7 Changes in reaction time (auto-pilot) **.** All participants reported not acting on auto pilot the way they used to. Some were more conscious about not reacting to things and for other participants given changes in thinking hasty reactions to situations did not take place. Participants reported to stop and think before they react. P8 stated that she stopped to observe first out of curiosity and explore what feelings she got. Participants stopped to think before they acted out. In circumstances of cravings participants reported only pausing and thinking but not reacting the same way they used to by indulging in their past habits.

> " I stop and think how I feel these days. More curious to know how far I can take it. It's like a challenge for me. If I can do this I can easily not succumb to cravings too. It's nice to explore what I feel in a different sense." (P8, personal communication, March 2019).

Past studies on Mindfulness therapy showed that practicing mindfulness did bring about a change in the levels of impulsiveness in practitioners. MBRP reduced the levels of impulsiveness thus resulting in reduced relapse rates (Carpetiner, Romo, Heitzmann, & Limosin, 2015). The participants learnt through mindfulness the art of not reacting but just observing. This in turn will lead to a non judgmental attitude.

2.2 Supporting outcomes of practise.

The second organizing theme that emerged was the additional benefits or outcomes of practise and abstinence. There were changes seen in the participants home environment, work environment and also in their social life.

2.2.1 Changes in family and relationships. Mindfulness practise results in change in thinking and behaviour. This may influence better relationships. The idea of pausing before reacting helps build relationships. Participants were seen to be more patient, responded to others with a calmer demeanour hence enhancing relationships. Participants were able to feel changes in their temperament. The intervention saw participants change in thoughts, behaviour and emotions. All participants saw changes in their relationships. Those married and with children found their association with family becoming more positive.

2.2.3 Changes at work. In the pre test interviews it was seen that smoking did have an effect on work habits amongst certain participants. Mindfulness training given through the intervention had seen to help with the participants in their working atmosphere. P1 stated that she was able to compartmentalize, and being a personal assistant to different directors this helped her make her work much smoother. P2 stated that she found over the last four weeks the number of errors committed at her workspace reduce.

Professionally participants were also able to identify when work acted as a trigger. Many participants narrated how work pressure was identified as triggers for wanting to smoke. Studies show that an increase in work stress is seen to have an increase in health risk behaviour. Strong relationships were seen between work stress and increased levels of smoking and alcohol consumption (Siegrist & Rödel, 2006).

2.1.4 Changes in social self. Participants narrated that they found changes in understanding their social self. They could understand what triggered them and social interactions were identified as triggers. Their social self had changed as they were more mindful to the fact that they wanted to smoke and they did experience a craving. Hence the next time they were in company they anticipated situations where triggers arose and coped with them accordingly. P2 stated that her social self had changed for the better as her way of

communicating with people had changed for the better. She saw herself snapping at people less thus making social interactions better.

2.3 Challenging experiences

The second organizing them that developed was the challenges faced by the participants during the process of the intervention. Practicing mindfulness came with some challenges which were brought out by the participants.

2.3.1 Mindful practice and exercise. The main part of the intervention that was challenging to the participants was to find time practicing mindfulness. P4 stated that the meditation part of the program was difficult. "Meditation is difficult. Definitely." (P4, personal communication, March 2019). Some participants found keeping track of the homework was relatively hard but once they got used to it, it became a part of their daily routine. P2 stated that she did not practice mindfulness on a daily basis as expected in the intervention.

Negative case for basic theme mindful practice and exercise. While participants felt the home work was difficult P3 felt it easier.

"Well the work sheets were okay. Ill fill it in when I remember to. I can't say I put down every thought" (P3, personal communication, March 2019)

As research states challenges are addressed in the sessions to help participants. (Bowen, Chawla, & Marlatt, 2011)

3. Experiences post intervention

In the third interview that was conducted post completion of the intervention one global theme, three organizing themes and seven basic themes emerged which have been explained below.

Table 4.4

Experiences of working women post completion of MBRP intervention

Global Theme	Organizing Theme	Basic Theme
3. Continued practice of MBRP	3.1 Experiencing change	3.1.1. Increased awareness within self
		3.1.2 positive work atmosphere
	3.2 Experiencing challenges through the intervention	3.2.1 Smoking-related challenges
		3.2.2 Session related challenges
		3.2.3 Practice related challenges
	3.3 Strategies for abstinence and continued practice	3.3.1Learnings from the program
		3.3.2 Approach towards relapse prevention

Over the eight weeks, participants were introduced to mindfulness meditation, with a gradual progression in the meditative process each week. To capture the experiences of the participants an interview was conducted post the eight weeks intervention. For each individual, the experience of mindfulness would be different. Practitioners had stated that they had become better listeners, they were less annoyed, they could communicate better, had a deeper sense of connection and attitude and many more (Kable, 2019). Mindfulness is seen to enhance emotion regulation, increase awareness, better self-perception and reduce automatic responses (Levin, 2017). In the setting of relapse prevention mindfulness is seen to help understand cravings better and also stay away from relapse (Haig, 2017).

3.1 Experiencing change.

Changes could develop from both practising mindfulness including teachings of the program as well as staying away from nicotine for larger periods. These changes emerged at base levels in the themes that developed from the interviews mid intervention. Changes seen post intervention were more advanced. Changes in the levels of patience, reduced stress levels, exploration of self, reduced levels of agitation were seen to be present amongst participants from other research studies (Haig, 2017). When it came to reduced smoking levels individuals who quit smoking were seen to have better functioning, felt stamina levels increase and breathing easier due to better cardiovascular health (Taylor Jr, Hasselblad, Henley, Thun, & Sloan, 2002).

3.1.1 Increased awareness within self. Participants also saw changes in their lifestyle four weeks into the program and it was seen to continue over the eight weeks of the program. Staying off tobacco for longer periods were seen to have affected the lifestyle of the participants in a positive way. Other participants stated that they saw increased levels of stamina and felt more active. Over the eight weeks, it was seen that the participants had understood the ideologies of mindfulness better and had noticed these changes in themselves and their lifestyle. Such changes could have positive benefits on the overall functioning of the individual. Mindfulness helps the practitioner aware of their body. Being aware of the body helps understand the state of the system. Mindfulness increased levels of awareness of the body, hence participants were able to notice changes as they were more sensitive to their bodily changes.

3.1.2 Positive work atmosphere. Themes that emerged from the interviews mid intervention did show changes in the participants professional lives. They were able to concentrate on their work better and take fewer breaks. Compartmentalizing became better thus making work life better with fewer mistakes. The changes though in similar areas post

intervention which saw changes in self thus impacting in participants work. These changes were seen to develop out of continued practise, brought in trough the program. Participants described relationships in their workspace become better due to better interactions between colleagues.

Research shows that mindfulness does show positive benefits at the workspace. It helps in the betterment of relationships, it is seen to have reduced emotional exhaustion at work and make individuals happier at their workspace thus increasing job satisfaction (Hülsheger, Alberts, Feinholdt, & Lang, 2013). Through emotional regulation, P6 was able to be calm while working with her dogs thus increasing productivity during her training. When it came to better relationships research studies have proved the same with mindfulness practice Better relationships resulted due to calmer minds and lesser reactivity. For participants, this enhanced their work and they were able to function more productively.

3.2 Experiencing Challenges through the intervention

The second organizing theme that emerged from practising mindfulness was the challenges faced by the participants. In MBRP the challenges faced by the participants were discussed after each exercise and remedies for the same emerge from such discussions. Meditation could be a challenge for many at first. The session addresses such challenges and discusses ways to overcome them (Bowen, Chawla & Marlatt, 2011).

3.2.1 Smoking-related Challenges. Giving up smoking has its difficulties. Participants narrated that giving up cigarettes were still a challenge for them, but they were in a position to overcome the challenges with the techniques learnt. P4 felt that it was not as big a challenge as it was before. She stated that she did not feel the urge to smoke as much as before. When looking at urges through the program it was seen that before the program the urges were high. The craving scale also showed higher mean scores for craving. Cravings

post eight weeks were seen to be manageable by the participants where they stated that they felt the intensity had reduced.

Craving is seen to be a challenge for all individuals with any form of dependence. Giving up on smoking has its challenges but MBRP showed ways to overcome them. Once acceptance is there which is brought about through mindfulness practice the intensity of craving reduces and relapse chances are seen to reduce (Goneka,1987). Craving was seen to have reduced among the group with no differences in perspective seen with respect to age or background of the participants.

3.2.2. Session related challenges. The next set of challenges that were seen to emerge were the challenges faced during the session. The findings were similar to those of other research using MBRP on women where it was seen that as sessions developed it became easier for the participants to adapt to the program (Haig, 2017). All participants did not know what to expect from the intervention at the start. As time went on over the eight weeks, the participants were more familiar with the process thus challenges were not as strong as when they started.

3.2.3 Practice related challenges. Post intervention saw the basic theme on practise emerged as being a challenge. But participants like P8 felt that keeping motivated helped them through the program where she would meditate on her own though thoughts of missing practise would come to her mind. Some participants overcame this challenge by making the practise their own. Participant P4's statement on mindfulness shows similarity in the findings of other research where it was stated that the challenge of practising would reduce over continuous practise. This may be because as time goes on the practice becomes more automatized (Haig, 2017). Participants found the practice becoming more difficult at a point but learnt how to personalize practise patterns to make it easier to do than avoid practising mindfulness fully.

3.3 Strategies for abstinence and continued practice.

More than their experience going through the eight week program, participants were in a better position after eight weeks to understand how the program benefitted them and how they could move forward in the journey of preventing relapse. According to Kabat-Zinn and Goenka, the idea of mindfulness is not to have any form of attachments (Goneka, 1987; Kabat – Zinn,1990) Cravings develop out of attachments. Participants here benefitted by understanding such attachments in the form of their cravings and changing their approach towards such attachments. Thus using these strategies relapse rates could reduce.

3.3.1.Learnings from the program. MBRP is a program designed to be more experiential in nature. Apart from this main learning participants felt that they learnt how *not to react* immediately. They learnt what a *craving* felt to them and how not to react to the craving through the act of smoking. *Being in the moment* is something else participants learnt out of the program, may it be pleasant or unpleasant. Other participants like P6 stated that they felt *calmer. Breath regulation* had also been pointed out by P6. “Now I know how to how to bring my attention to focus on my breathe. Then I am able to become calm.” (P6 personal communication, May 2019). P5 explained how she understood the idea of *non-permanence* and that helped her through her recovery process. Learning such *cognitive restructuring* methods was also seen to help participants. When compared to the interviews taken mid intervention it could be seen that the experiences and learning of the participants were more in-depth in nature where more understanding was seen to be internalized. Bringing attention to breath results in practitioner becoming aware of the moment and develops into him/her becoming calmer (Kabat-Zinn, 1992).

Pausing before reacting, understanding cravings, focus on the present moment, the idea of non-permanence are some of the core experiences felt by participants who undergo MBRP. All participants were seen to have a deeper understanding of the basic teachings of

mindfulness and have adapted them. Pausing before reacting, understanding cravings, focus on the present moment, the idea of non-permanence are some of the core experiences felt by participants who undergo MBRP. Other researchers have found similar results in experiences of MBRP amongst the women population (Haig, 2017).

3.3.2 Approach towards relapse prevention. The last three sessions of MBRP look into approaches that one could follow to prevent a relapse. Participants found this beneficial and stated that they would use the techniques taught to them such as SOBER breathing space and the cards designed by them at the end of the program. Participants also felt like the handouts are given to them and their home worksheets would act as motivations against relapse.

With the learnings from the program, understanding the challenges faced participants were in a position to plan ahead using strategies for prevention of relapse. The last few sessions of the MBRP program concentrated on development of strategies to prevent participants into the relapse cycle by imparting them with tools that would help them in critical situations. Participants were also made to keep remembrance cards which help them cope in dire situations. With such strategies participants were in a better position to face challenging situations on their own without relapsing.

Negative Case for basic theme approaches towards relapse prevention. While participants had strategies for preventing relapse P5 stated that she was not thinking about it she was taking a day at a time

> "I'm not thinking of relapse now. I'm happy taking one step at a time, where I'm not stressing too much about relapse but rather being happy about how I feel right now ." (P5 personal communication, May 2019)

Kabat zinn talks about mindfulness saying that it teaches practitioners to stay in the moment. (Kabat-Zinn, 1992).

Discussion on pre-test post-test measures

The quantitative section included a pre and post-test for four scales that were administered. The quantitative analysis was done after the intervention was completed.

Pre and post-test measures were conducted for both qualitative and quantitative data as the qualitative data captured the experiences of the participants through the MBRP intervention. The quantitative results gave the researcher the objective changes in the participants whereas the qualitative results narrate details of the participants subjective experiences. Intervention studies give better understanding of progress in cases where quantitative measures are matched with qualitative input thus making the mixed method more lucrative. Given the group intervention suggested smaller groups of six to 12 members and the results of the quantitative data consisting of only eight participants cannot be generalized.

The pre and post-test scores were arrived at using the scoring keys and the results from each test were analysed checking the mean values obtained. This was achieved with the help of the SPSS software version 18.0.2. Using SPSS normality of the data was checked.

Table 4.5

Test of normality

Tests of Normality

	Shapiro-Wilk		
Test	Statistic	df	Sig.
SASEQ_Pre	.913	8	.374
SASEQ_Post	.961	8	.824
MAAS_Pre	.884	8	.208
MAAS_Post	.931	8	.528
PSS_Pre	.909	8	.349

PSS_Post	.803	8	.061
Craving meter_Pre	.836	8	.056
Craving meter_Post	.848	8	.090

The data being normally distributed, the mean scores were compared using paired sample t-test. The significance value of the means was also found. Below are the results of the paired sample t-test analysis.

Table 4.6

Mean values of pre and post-test scores of abstinence self-efficacy amongst nicotine-dependent working women.

Variable	Test	*N*	Mean	Std. Deviation	Std. Error Mean	*T* value	Sig. Level
Smoking abstinence self-efficacy	Pre-test	8	5	2.507	.886	12.689	.000**
	Post-test	8	19.38	2.066	.730		

From the table, it can be seen that concerning smoking abstinence self-efficacy the mean of the pre-test scores of the eight participants was five and the standard deviation was seen to be 2.507. the mean from the post-test was found to be 19.38 and the standard deviation was at 2.066. The t-value was seen to be 12.689 resulting in a level of significance of .000 which is highly significant. The mean value having been much higher during the post-test proved that the levels of abstinence self-efficacy were at a higher level amongst participants after they went through the intervention.

Relapse models state that a person's self-efficacy or confidence to abstain would help in predicting the outcome of the individual not relapsing. Social learning models of relapse

show that low self-efficacy is a major reason why there is a relapse in smoking (Niaura,2000; Niaura et al., 1988; Di Clemente, Prochaska & Gilbertini, 1985).

Table 4.7

Mean values of pre and post-test scores of mindful attention awareness levels amongst nicotine-dependent working women

Variable	Test	*N*	Mean	Std. Deviation	Std. Error Mean	*T* value	Sig. Level
Mindful attention awareness	Pre-test	8	44.50	7.171	2.535	11.804	.000**
	Post-test	8	66.75	6.228	2.202		

The above table shows the results of the pre and post-test scores of the mindful attention awareness scale. The t-value that was calculated was 11.804 with a significance level at .000 which showed a highly significant difference between the pre and post-test that showed the levels of mindfulness before and after the intervention. With the mean values seen to been higher at the post-test it was concluded that the levels of mindfulness increased after the intervention and this was seen to be at a significant value of .000.

Researches show that higher levels of mindfulness help in reducing or eliminating addictive behaviour. Initial trials using mindfulness training had proved to be more beneficial than standard treatments for smoking cessation (Brewer, Mallik, Babuscio, Nich, Johnson, Deleone & Rounsaville, 2011).The higher the level of cigarette craving the more likely it was for an individual to relapse and craving most often preceded a smoking relapse (Killen, & Fortmann, 1997). other researches have proved that neural pathways link mindful attention to a reduction in cravings(Westbrook, Creswell, Tabibnia, Julson, Kober, & Tindle, 2013).

Table 4.8

Mean values of the pre and post-test scores of perceived stress levels amongst nicotine-dependent working women

Variable	Test	*N*	Mean	Std. Deviation	Std. Error Mean	*T* value	Sig Level
Perceived Stress	Pre-test	8	22	6.908	2.442	6.319	.000**
	Post-test	8	11.75	3.454	1.221		

The perceived stress levels of the eight participants were analyzed and the results got showed a mean value of 22 for the pre-test and a mean value of 11.75 after the intervention. The t-value for the paired sample t-test was seen to be 6.319. the significance value was observed to be .000 which showed that the results were highly significant thus proving a difference in levels of stress before and after the intervention. Having seen the mean values it was concluded that the levels of stress were seen to have reduced after the participants went through the eight weeks of intervention.

It was seen in studies that higher levels of stress resulted in higher consumption of cigarettes and lesser self-efficacy to quit smoking (Ng & Jeffery, 2003). (Cohen & Lichtenstein, 1990) in their research on perceived stress, quitting smoking and smoking relapse concluded that there was a relationship between alterations in stress levels and alterations in peoples smoking statuses. It was seen that stress decreased as the duration of abstaining increased. In other research, it was seen that in those individuals who are highly dependent on cigarettes reports received were that smoking was a coping mechanism for stress and quitting brought out reactions that quitting deprived them of their coping resource. When it came to relapse it was noted that increased stress levels saw an increase in relapse levels. Other researches on mindfulness and stress show that reduced stress levels using

mindfulness were seen to have reductions in physiological symptoms caused by stress, increased levels in sense of control on their lives amongst other benefits (Astin, 1997).

Summary

The results obtained from the pre and post test scores of the smoking abstinence self-efficacy scale found a difference amongst the female employees before and after the intervention. Self efficacy scores had risen post the intervention for the participants. Also when it came to the levels of mindfulness of the female employees before and after the intervention it was seen that post the intervention the levels of mindfulness had increased amongst the participants. There was a difference also seen in the levels of perceived stress amongst the female employees before and after the intervention where the perceived stress had reduced in the participants post intervention completion.

Discussion on follow up

Follow up was done through telephonic conversations where the participants were asked whether they continued practising mindfulness and the techniques taught to them. The follow-up calls were made at one week, one, two and six months post intervention. The main objective of the follow-up was to check if the participants continued to practise mindfulness and following what was taught during the intervention. Six out of eight participants were seen to practise mindfulness at an average of four days in a week for a minimum of ten minutes to a maximum of half an hour a day. Two of the eight participants were not regular with their practice but did use mindfulness techniques through their day to day activities. The one week and one month follow up showed no full blown relapses. The two month follow up saw only four out of the eight participants practise mindfulness at an average of four days a week with no full blown relapses.

Table 4.10

Table showing follow up results.

Time Line	Number practicing mindfulness	Number abstaining using cigarettes	Number of Full blown relapses	Number of Occasional Cigarette consumption
1 week	8	8	-	-
1 month	6	8	-	-
2 months	4	6	-	2
6 months	3	2	3	3

The sixth month follow up it was seen that three out of the eight participants continued to practise mindfulness at an average of three days a week. Success rates were seen to be at 25 percent where two participants had shown no signs of relapse. Three out of the six remaining participants reported smoking occasionally bringing the percentage of occasional consumers to 37.5 percent. One out of the three had smoked twice in the six months. The number of full blown relapses were seen to be 37.5 percent. The challenges faced by the participants post the six month follow up showed lack of follow up reduced the levels of motivation to practise mindfulness and increased triggers over time with lack of support deterred the participants from their goal of not smoking.

Participants who continued practising mindfulness stated that it had become much easier over a period of time. They can included it in their daily routine. They could notice that they were functioning better physically and mentally without smoking and with continuing mindful practise. Two of the three participants who fell into a full blown relapse had big changes in their lives where they had moved countries on work. Relapses eventually happened due to major life changes and inability to cope. Three of the participants indulged in smoking occasionally, at circumstances when they were unable to surpass the trigger. One

of the three occasional smokers reported to have been practising mindfulness regularly and found it challenging to hold on to the abstinence. All participants who had a relapse were single. Participants who were older by age with families and children were seen to continue the practise though more understanding could go into why so.

Follow up sessions could be introduced with participants where virtual follow up options could be introduced in order to reduce relapse rates. Mindfulness sessions could be conducted where participants could attend. With the results, follow up sessions could be included for participants to keep learnings from the intervention intact. With such changes in the follow up, relapse rates amongst participants could be reduced.

Chapter 5

Summary and Conclusion

The aim of this embedded study was to to explore the experiences of the participant undergoing MBRP for smoking behaviour. The study which was designed in such a way that the experiences were recorded periodically both quantitatively and qualitatively. The objective of the study was to understand working women's smoking behaviour before the intervention, their experience with MBRP on smoking behaviour mid-way into the intervention and post completion of the MBRP intervention. The number of participants that completed the intervention were eight. The major findings are discussed in this chapter.

The main aim of the study is to determine the experiences of the participant undergoing MBRP for nicotine dependence and also the effect of mindfulness-based relapse prevention therapy on smoking relapse prevention amongst female nicotine dependent employees.

Major findings

Participants were influenced to take up to smoking by peers in their personal and professional like as well as by family. There was a transformation witnessed in personal and

professional life as well as the ideology toward the habit over the smoking years. Changes in physical and psychological health was noticed. With abstinence being a challenge stress and negative emotional experiences made abstinence short lived.

The participants noticed changes in themselves which impacted their personal like, relationships with family, changes at work as well as in social life. The smoking abstinence self-efficacy scores had increased in the participants. Participants experienced positive changes within themselves with increased self awareness. Experiences included being able to identify triggers, understand cravings, being present in the moment, reflecting on breath, reduction in stress among others. Participants also experienced challenges in the practise and home work.

Continued practise saw the participants experience changes in awareness of themselves. Positive changes were noticed in the work space. Post eight weeks saw participants experiencing challenges with not smoking, the sessions and mindfulness practise which eased over a period of time. The experience of MBRP helped participants in thoughts and strategies of abstinence using mindful learnings and their approach toward relapse prevention.

These conclusions were supported by the quantitative findings of increased abstinence self efficacy, mindfulness and reduced levels of perceived stress and craving.

A complete transition was seen in the participants from having been unable to resist a craving to understand what causes them to smoke and develop strategies to resist the craving and to continue resisting any craving. The experience from smoking everyday to not smoking at all , the challenges faced by the participants and the learnings have all come out through the three phases of interviews .

MBRP helps working women understand themselves better thus increasing internal reflection apart from developing better relationships at home and work. Reduced levels of

perceived stress and cravings develop out of practicing mindfulness exercises and though disassociation from regular patterns of thought and behaviour. Reacting less on auto pilot and understanding cravings acts as a mechanism for change. Working women use techniques learnt to compartmentalize work and function better. Signs of irritability and temperament changes are managed better using learning from the program. As seen pre intervention professional situations were no more appraised as a reason to smoke. Such learnings helped participants form better relationships at work.

Strategies to prevent relapse in the future were constructed using learnings from MBRP.

Follow up showed three of the eight participants had had full blown relapses yet not as intense as pre intervention.

Implications

MBRP changes women's smoking behaviour by helping participants understand a craving and also by understanding emotions and thoughts without reacting to the same hence changing patterns of behaviour. Working women experience positive changes in their personal and professional life. Working women experience reduced levels of perceived stress which is an indicator for relapse. They also experience a change in behavior, as well as in smoking behaviour in turn increasing the abstinence self efficacy of the participant.

With respect to continued abstinence experiences during the program especially exercises like SOBER breathing and urge surfing are used to cope. MBRP thus could help women who wish to stay away from a relapse by understanding triggers, helping them cope with triggers, understanding and controlling cravings for cigarettes as well as bringing about a change in thought, emotions and behaviour towards smoking.

Continued practice of mindfulness and using strategies taught in the program could help in long term smoking relapse prevention thus making the experience positive for relapse

prevention. Follow up if regular could cut down relapse rates and make the program show better outcomes.

Limitations

As much as the researcher tried to include all aspects to make the study reliable no study goes without its limitations. The major limitation is the sample size. Though the research design and the therapy guidelines favour smaller groups, for generalization data from a larger group would be more favourable.

The sample was limited to working women alone. Thought the reason for taking up this population was made evident in the introductory chapter, this could be extended to larger populations which include different age groups of people and gender. It could also be extended to stay at home moms and postpartum smokers, college students, males of all ages and so on.

The sample looked at individuals who were from a particular geographic area as the intervention required the participants to come in for weekly two hour sessions which ranged over a span of eight weeks. The sample being very area-specific results cannot be generalized to larger populations.

Only educated, working women were included in the study. Many uneducated individuals who may not know the language English would also have nicotine dependence. Thus the sample was limited to only those individuals who were fluent in English. The study could be broadened by being multilingual.

The sample included only those individuals who came under the moderate smokers category where they smoked eight to pack of cigarettes a day. Thus this program could be extended to those individuals who are chain smokers too and have been smoking for longer periods. The study could also extend to individuals who have other physical or mental health issues and are advised to quit smoking.

Carbon monoxide tests were not done and abstinence was checked only through self report.

A control group was not included in the study.

Group influences were not looked for in its totality which could have played a bigger role than mentioned in the study.

All participants did not quit on the same day though they all had set quit dates in the same week before the start of the intervention.

Families of the participants were not interviewed.

Future Research

As this study has only considered women from a particular working group further research can be done on different populations to expand the knowledge in this spectrum. Research can also be done on whether delivery of the program could be done on other modes than face to face delivery. Different age groups could be included in the groups to see if there are any differences in results. The research could extend to comorbid conditions too instead of nicotine dependence alone. A deeper understanding if and how this program works on changing neural circuit's in the brain can also be researched upon for a better understanding of the biological implications of the program on nicotine dependents. Research on mindfulness shows changes in the cortical structures of the brain (Ives-Deliperi, Solms & Meintjes, 2010).

References

Aditi, N., Sahil, N., Bindu, B., & Satish, B. (2014). Tobacco and its ill effects-A review. *Indian Journal of Contemporary Dentistry*, *2*(1), 163. doi:10.5958/j.2320-5962.2.1.033

Alexander, V. L., & Tatum, B. C. (2014). Effectiveness of cognitive therapy and mindfulness

tools in reducing depression and anxiety: A mixed method study. *Psychology*, *05*(15), 1702-1713. https://doi.org/10.4236/psych.2014.515178

Allen, M., Bromley, A., Kuyken, W., & Sonnenberg, S. J. (2009). Participants' experiences of mindfulness-based cognitive therapy: "It changed me in just about every way possible". *Behavioural and Cognitive Psychotherapy*, *37*(4), 413-430. https://doi.org/10.1017/s135246580999004x

Anthony, A. A., & Joseph, M. T. (2014). Kannur: History, background and trade linkages. *SMEs in Indian Textiles*, 41-51. https://doi.org/10.1057/9781137444578_6

Astin, J. A. (1997). Stress Reduction through Mindf ulness Meditation. *Psychotherapy and Psychosomatics*, *66*(2), 97-106. doi:10.1159/000289116

Aung, M., Yuasa, M., Moolphate, S., Kitajima, T., Fukuda, H., Lorga, T., & Marui, E. (2016). Challenges for Smoking Cessation Intervention as Part of Primary Health Care Services in Developing Countries. *Journal of Smoking Cessation*, *11*(4), 211-218. doi:10.1017/jsc.2014.28

Bailey, D. (2005). Relapse Prevention: Maintenance Strategies in the Treatment of Addictive Behaviours (2nd edition), * G. Alan Marlatt and Dennis M. Donovan (eds), * New York, The Guilford Press, 2005, pp. 416, ISBN 1593851766, 32.50. *British Journal of Social Work*, *36*(4), 694-696. doi:10.1093/bjsw/bcl044

Barrera, A., Pérez-Stable, E., Delucchi, K., & Muñoz, R. (2009). Global Reach of an Internet Smoking Cessation Intervention among Spanish- and English-Speaking Smokers from 157 Countries. *International Journal of Environmental Research and Public Health*, *6*(3), 927-940. doi:10.3390/ijerph6030927

Becoña, E., & Vázquez, F. L. (1997). Does Using Relapse Prevention Increase the Efficacy of a Program for Smoking Cessation?: An Empirical Study. *Psychological Reports*, *81*(1), 291-296. doi:10.2466/pr0.1997.81.1.291

Bell, S., Taylor, R., Singleton, E., Henningfield, J., & Heishman, S. (1999). Smoking after nicotine deprivation enhances cognitive performance and decreases tobacco craving in drug abusers. *Nicotine & Tobacco Research, 1*(1), 45-52. doi:10.1080/14622299050011141

Benefits of Mindfulness. (n.d.). Retrieved from https://www.helpguide.org/harvard/benefits-of-mindfulness.htm

Berrettini, W. (2008). Nicotine Addiction. *American Journal of Psychiatry, 165*(9), 1089-1092. doi:10.1176/appi.ajp.2008.08050780

Black, D. S., Sussman, S., Johnson, C. A., & Milam, J. (2011). Psychometric assessment of the mindful attention awareness scale (MAAS) among Chinese adolescents. *Assessment, 19*(1), 42-52. https://doi.org/10.1177/1073191111415365

Bowen, S., Chawla, N., Collins, S. E., Witkiewitz, K., Hsu, S., Grow, J., … Marlatt, A. (2009). Mindfulness-Based Relapse Prevention for Substance Use Disorders: A Pilot Efficacy Trial. *Substance Abuse*, *30*(4), 295-305. doi:10.1080/08897070903250084

Bowen, S., Chawla, N., & Marlatt, G. A. (2011). *Mindfulness-based Relapse Prevention for Addictive Behaviours: A Clinician's Guide*. New York, NY: Guilford Press.

Bowen, S., Chawla, N., & Marlatt, G. A. (2011). *Mindfulness-based Relapse Prevention for Addictive Behaviours: A Clinician's Guide*. New York, NY: Guilford Press.

Boyatzis, R. E. (1998). *Transforming Qualitative Information: Thematic Analysis and Code Development*. Thousand Oaks, CA: SAGE.

Brewer, J. A., Elwafi, H. M., & Davis, J. H. (2013). Craving to quit: Psychological models and neurobiological mechanisms of mindfulness training as treatment for addictions. *Psychology of Addictive Behaviours, 27*(2), 366-379. doi:10.1037/a0028490

Brewer, J. A., Mallik, S., Babuscio, T. A., Nich, C., Johnson, H. E., Deleone, C. M., … Rounsaville, B. J. (2011). Mindfulness training for smoking cessation: Results from a randomized controlled trial. *Drug and Alcohol Dependence*, *119*(1-2), 72-80. doi:10.1016/j.drugalcdep.2011.05.027

Brewer, J. A., Mallik, S., Babuscio, T. A., Nich, C., Johnson, H. E., Deleone, C. M., … Rounsaville, B. J. (2011). Mindfulness training for smoking cessation: Results from a randomized controlled trial. *Drug and Alcohol Dependence*, *119*(1-2), 72-80. doi:10.1016/j.drugalcdep.2011.05.027

Brown, K. W., & Ryan, R. M. (2003). The benefits of being present: Mindfulness and its role in psychological well-being. *Journal of Personality and Social Psychology*, *84*(4), 822-848. doi:10.1037/0022-3514.84.4.822

Buczkowski, K., Marcinowicz, L., Czachowski, S., & Piszczek, E. (2014). Motivations toward smoking cessation, reasons for relapse, and modes of quitting: results from a qualitative study among former and current smokers. *Patient Preference and Adherence*, 1353. doi:10.2147/ppa.s67767

Businelle, M. S., Kendzor, D. E., Reitzel, L. R., Vidrine, J. I., Castro, Y., Mullen, P. D., … Wetter, D. W. (2013). Pathways Linking Socioeconomic Status and Postpartum Smoking Relapse. *Annals of Behavioural Medicine*, *45*(2), 180-191. doi:10.1007/s12160-012-9434-x

Cancer.gov/publications/dictionary/smoking cessation

Carmody, T. P., Vieten, C., & Astin, J. A. (2007). Negative Affect, Emotional Acceptance, and Smoking Cessation. *Journal of Psychoactive Drugs*, *39*(4), 499-508. doi:10.1080/02791072.2007.10399889

Center, T. T., Workgroup, T. D., Baker, T., Piper, M., McCarthy, D., Bolt, D., … Toll, B. (2007). Time to first cigarette in the morning as an index of ability to quit smoking:

Implications for nicotine dependence. *Nicotine & Tobacco Research*, *9*, 555-570. doi:10.1080/14622200701673480

Cheung, Y. T., Chan, C. H., Lai, C. J., Chan, W. F., Wang, M. P., Li, H. C., … Lam, T. (2015). Using WhatsApp and Facebook Online Social Groups for Smoking Relapse Prevention for Recent Quitters: A Pilot Pragmatic Cluster Randomized Controlled Trial. *Journal of Medical Internet Research*, *17*(10), e238. doi:10.2196/jmir.4829

Chiesa, A., & Serretti, A. (2009). Mindfulness-Based Stress Reduction for Stress Management in Healthy People: A Review and Meta-Analysis. *The Journal of Alternative and Complementary Medicine*, *15*(5), 593-600. doi:10.1089/acm.2008.0495

Chirikos, T. N., Herzog, T. A., Meade, C. D., Webb, M. S., & Brandon, T. H. (2004). Cost-effectiveness analysis of a complementary health intervention: The case of smoking relapse prevention. *International Journal of Technology Assessment in Health Care*, *20*(4), 475-480. doi:10.1017/s0266462304001382

Cinciripini, P. M., Lapitsky, L. G., Wallfisch, A., Mace, R., Nezami, E., & Van Vunakis, H. (1994). An evaluation of a multicomponent treatment program involving scheduled smoking and relapse prevention procedures: Initial findings. *Addictive Behaviours*, *19*(1), 13-22. doi:10.1016/0306-4603(94)90047-7

Cinciripini, P., Robinson, J., Carter, B., Lam, C., Wu, X., De Moor, C., … Wetter, D. (2006). The effects of smoking deprivation and nicotine administration on emotional reactivity. *Nicotine & Tobacco Research*, *8*(3), 379-392. doi:10.1080/14622200600670272

Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A Global Measure of Perceived Stress. *Journal of Health and Social Behaviour*, *24*(4), 385. doi:10.2307/2136404

Cohen, S., & Lichtenstein, E. (1990). Perceived stress, quitting smoking, and smoking relapse. *Health Psychology, 9*(4), 466-478. doi:10.1037//0278-6133.9.4.466

Conway, T. L., & Cronan, T. A. (1992). Smoking, exercise, and physical fitness. *Preventive Medicine, 21*(6), 723-734. doi:10.1016/0091-7435(92)90079-w

Conway, T. L., Woodruff, S. I., Edwards, C. C., Elder, J. P., Hurtado, S. L., & Hervig, L. K. (2004). Operation Stay Quit: Evaluation of Two Smoking Relapse Prevention Strategies for Women after Involuntary Cessation during U.S. Navy Recruit Training. *Military Medicine, 169*(3), 236-242. doi:10.7205/milmed.169.3.236

Creswell, J. W., & Creswell, J. D. (2013). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. Thousand Oaks, CA: SAGE.

Creswell, J. W., Clark,V.P.,& Garrett,A.L. (2003). Advanced mixed methods research. Handbook of mixed methods in social and behavioural research. Thousand Oaks, CA; Sage(2003);209-240

Cropley, M., Ussher, M., & Charitou, E. (2007). Acute effects of a guided relaxation routine (body scan) on tobacco withdrawal symptoms and cravings in abstinent smokers. *Addiction, 102*(6), 989-993. doi:10.1111/j.1360-0443.2007.01832.x

Das, S. K. (2003). Harmful health effects of cigarette smoking. *Molecular and Cellular Biochemistry, 253*(1/2), 159-165. doi:10.1023/a:1026024829294

Davis, D. M., & Hayes, J. A. (2012). What are the benefits of mindfulness?: A wealth of new research has explored this age-old practice. Here's a look at its benefits for both clients and psychologists. *PsycEXTRA Dataset*. doi:10.1037/e584442012-022

Davis, J. M., Fleming, M. F., Bonus, K. A., & Baker, T. B. (2007). A pilot study on mindfulness based stress reduction for smokers. *BMC Complementary and Alternative Medicine, 7*(1). doi:10.1186/1472-6882-7-2

Davis, J. M., Goldberg, S. B., Anderson, M. C., Manley, A. R., Smith, S. S., & Baker, T. B. (2014). Randomized Trial on Mindfulness Training for Smokers Targeted to a Disadvantaged Population. *Substance Use & Misuse, 49*(5), 571-585. doi:10.3109/10826084.2013.770025

Davis, J. M., Manley, A. R., Goldberg, S. B., Smith, S. S., & Jorenby, D. E. (2014). Randomized trial comparing mindfulness training for smokers to a matched control. *Journal of Substance Abuse Treatment, 47*(3), 213-221. doi:10.1016/j.jsat.2014.04.005

Davis, J. M., Mills, D. M., Stankevitz, K. A., Manley, A. R., Majeskie, M. R., & Smith, S. S. (2013). Pilot randomized trial on mindfulness training for smokers in young adult binge drinkers. *BMC Complementary and Alternative Medicine*, *13*(1). doi:10.1186/1472-6882-13-215

de Winter, J.C.F. (2013) "Using the Student's t-test with extremely small sample sizes," Practical Assessment, Research, and Evaluation: Vol. 18 , Article 10. DOI: https://doi.org/10.7275/e4r6-dj05

DiClemente, C. C., Prochaska, J. O., & Gibertini, M. (1985). Self-efficacy and the stages of self-change of smoking. *Cognitive Therapy and Research*, *9*(2), 181-200. doi:10.1007/bf01204849

Dominguez, M., DiCapua, D., Leydon, G., Loomis, C., & Longbrake, E. (2018). A Neurology Clerkship Curriculum Using Video-Based Lectures and Just-in-Time Teaching (JiTT). *MedEdPORTAL, 14*. doi:10.15766/mep_2374-8265.10691

Dunbar, M. S., Scharf, D., Kirchner, T., & Shiffman, S. (2010). Do smokers crave cigarettes in some smoking situations more than others? Situational correlates of craving when smoking. *Nicotine & Tobacco Research, 12*(3), 226-234. doi:10.1093/ntr/ntp198

Dutta, S., H.B, A., Tripathi, J., Sinha, N., Roy, S., & Agrawal, R. (2016). Prevalence of Habit of Tobacco and their Effects: A Clinical Study. *Journal of Advanced Medical and Dental Sciences Research, 4*(4), 88-91. doi:10.21276/jamdsr.2016.4.4.19

El Hajj, M. S., Al Nakeeb, R. R., & Al-Qudah, R. A. (2012). Smoking cessation counseling in Qatar: community pharmacists' attitudes, role perceptions and practices. *International Journal of Clinical Pharmacy, 34*(4), 667-676. doi:10.1007/s11096-012-9663-x

Elfeddali, I., Bolman, C., Candel, M. J., Wiers, R. W., & De Vries, H. (2012). Preventing Smoking Relapse via Web-Based Computer-Tailored Feedback: A Randomized Controlled Trial. *Journal of Medical Internet Research, 14*(4), e109. doi:10.2196/jmir.2057

Elwafi, H. M., Witkiewitz, K., Mallik, S., IV, T. A., & Brewer, J. A. (2013). Mindfulness training for smoking cessation: Moderation of the relationship between craving and cigarette use. *Drug and Alcohol Dependence, 130*(1-3), 222-229. doi:10.1016/j.drugalcdep.2012.11.015

Erskine, J. A., Ussher, M., Cropley, M., Elgindi, A., Zaman, M., & Corlett, B. (2012). Effect of thought suppression on desire to smoke and tobacco withdrawal symptoms. *Psychopharmacology, 219*(1), 205-211. doi:10.1007/s00213-011-2391-4

Etikan, I. (2016). Comparison of Convenience Sampling and Purposive Sampling. *American Journal of Theoretical and Applied Statistics, 5*(1), 1. doi:10.11648/j.ajtas.20160501.11

Eyles, C., Leydon, G., Hoffman, C., Copson, E., Prescott, P., & Lewith, G. (2014). Mindfulness for the fatigue, anxiety and depression in women with metastatic breast cancer: A mixed method feasibility study. *The Journal of Alternative and Complementary Medicine*, *20*(5), A60-A60. https://doi.org/10.1089/acm.2014.5157.abstract

Fagan, K. A. (2007). Smoking-Cessation Counseling Practices of College/University Health-Care Providers—A Theory-Based Approach. *Journal of American College Health*, *55*(6), 351-360. doi:10.3200/jach.55.6.351-360

Gao, Y., & Shi, L. (2015). Mindfulness, Physical Activity and Avoidance of Secondhand Smoke: A Study of College Students in Shanghai. *International Journal of Environmental Research and Public Health*, *12*(8), 10106-10116. doi:10.3390/ijerph120810106

Garland, E. L. (2011). Trait mindfulness predicts attentional and autonomic regulation of alcohol cue-reactivity. *Journal of Psychophysiology*, *25*(4), 180-189. https://doi.org/10.1027/0269-8803/a000060

Garvey, A. J., Bliss, R. E., Hitchcock, J. L., Heinold, J. W., & Rosner, B. (1992). Predictors of smoking relapse among self-quitters: A report from the normative aging study. *Addictive Behaviours*, *17*(4), 367-377. doi:10.1016/0306-4603(92)90042-t

Giannakopoulos, G., Tzavara, C., Dimitrakaki, C., Kolaitis, G., Rotsika, V., & Tountas, Y. (2010). Emotional, behavioural problems and cigarette smoking in adolescence: findings of a Greek cross-sectional study. *BMC Public Health*, *10*(1). doi:10.1186/1471-2458-10-57

Gierisch, J. M., Bastian, L. A., Calhoun, P. S., McDuffie, J. R., & Williams, J. W. (2012). Smoking Cessation Interventions for Patients with Depression: A Systematic Review and Meta-analysis. *Journal of General Internal Medicine*, *27*(3), 351-360. doi:10.1007/s11606-011-1915-2

Gonzalez, A., Vujanovic, A. A., Johnson, K. A., Leyro, T. M., & Zvolensky, M. J. (2009). The Role of Mindful Attention in Regard to the Relation Between Negative Affect Reduction Outcome Expectancies and Emotional Vulnerability Among Adult Cigarette Smokers. *Cognitive Therapy and Research*, *33*(6), 645-656. doi:10.1007/s10608-009-9246-x

Gonzalez, A., Vujanovic, A. A., Johnson, K. A., Leyro, T. M., & Zvolensky, M. J. (2009). The Role of Mindful Attention in Regard to the Relation Between Negative Affect Reduction Outcome Expectancies and Emotional Vulnerability Among Adult Cigarette Smokers. *Cognitive Therapy and Research*, *33*(6), 645-656. doi:10.1007/s10608-009-9246-x

Grabovac, A. D., Lau, M. A., & Willett, B. R. (2011). Mechanisms of mindfulness: A Buddhist psychological model. *Mindfulness*, *2*(3), 154-166. https://doi.org/10.1007/s12671-011-0054-5

Greene, J. C., & Caracelli, V. J. (1997). *Advances in mixed-method evaluation: the challenges and benefits of integrating diverse paradigms*. New York, NY: Jossey-Bass.

Grossman, P., Niemann, L., Schmidt, S., & Walach, H. (2004). Mindfulness-based stress reduction and health benefits. *Journal of Psychosomatic Research*, *57*(1), 35-43. doi:10.1016/s0022-3999(03)00573-7

Gwaltney, C. J., Metrik, J., Kahler, C. W., & Shiffman, S. (2009). Self-efficacy and smoking cessation: A meta-analysis. *Psychology of Addictive Behaviours*, *23*(1), 56-66. doi:10.1037/a0013529

Gwaltney, C. J., Metrik, J., Kahler, C. W., & Shiffman, S. (2009). Self-efficacy and smoking cessation: A meta-analysis. *Psychology of Addictive Behaviours*, *23*(1), 56-66. doi:10.1037/a0013529

Hall, S. M., Rugg, D., Tunstall, C., & Jones, R. T. (1984). Preventing relapse to cigarette smoking by behavioural skill training. *Journal of Consulting and Clinical Psychology*, *52*(3), 372-382. doi:10.1037//0022-006x.52.3.372

Harris, A. H. (2015). A qualitative study on the introduction of mindfulness based relapse prevention (MBRP) into a therapeutic community for substance abusers. *Therapeutic Communities: The International Journal of Therapeutic Communities*, *36*(2), 111-123. doi:10.1108/tc-04-2014-0015

Heppner, W. L., Spears, C. A., Correa-Fernández, V., Castro, Y., Li, Y., Guo, B., … Wetter, D. W. (2016). Dispositional Mindfulness Predicts Enhanced Smoking Cessation and Smoking Lapse Recovery. *Annals of Behavioural Medicine*, *50*(3), 337-347. doi:10.1007/s12160-015-9759-3

Hong, L. E., Yang, X., Wonodi, I., Hodgkinson, C. A., Goldman, D., Stine, O. C., … Thaker, G. K. (2011). ACHRNA5allele related to nicotine addiction and schizophrenia. *Genes, Brain and Behaviour*, *10*(5), 530-535. doi:10.1111/j.1601-183x.2011.00689.x

Huang, F. F., Jiao, N. N., Zhang, L. Y., Lei, Y., & Zhang, J. P. (2015). Effects of a family-assisted smoking cessation intervention based on motivational interviewing among low-motivated smokers in China. *Patient Education and Counseling*, *98*(8), 984-990. doi:10.1016/j.pec.2015.02.017

Hällfors, J., Palviainen, T., Surakka, I., Gupta, R., Buchwald, J., Raevuori, A., … Loukola, A. (2018). Genome-wide association study in Finnish twins highlights the connection between nicotine addiction and neurotrophin signaling pathway. *Addiction Biology*, *24*(3), 549-561. doi:10.1111/adb.12618

Ives-Deliperi, V. L., Solms, M., & Meintjes, E. M. (2011). The neural substrates of mindfulness: An fMRI investigation. *Social Neuroscience*, *6*(3), 231-242. https://doi.org/10.1080/17470919.2010.513495

Institute of Medicine (US) Committee on Opportunities in Drug Abuse Research. (1996). Pathways of Addiction:Opportunities in Drug Abuse Research. *Washington (DC): National Academies Press (US); 1996. C, Diagnostic Criteria.Available*. doi:10.17226/5297

Jaret P. (2010, January 26). Find Your Smoking Triggers. Retrieved from https://www.webmd.com/smoking-cessation/features/find-your-smoking-triggers#1

Johnston, V., Westphal, D. W., Earnshaw, C., & Thomas, D. P. (2012). Starting to smoke: a qualitative study of the experiences of Australian indigenous youth. *BMC Public Health*, *12*(1). doi:10.1186/1471-2458-12-963

Kabat-Zinn, J. (1990). *Full catastrophe living: Using the wisdom of your body and mind to face stress, pain, and illness*. New York, NY: Bantam.

Kabat-Zinn, J. (1994). *Wherever You Go, There You Are: Mindfulness Meditation in Everyday Life*. New York, NY: Hyperion.

Karyadi, K. A., VanderVeen, J. D., & Cyders, M. A. (2014). A meta-analysis of the relationship between trait mindfulness and substance use behaviours. *Drug and Alcohol Dependence*, *143*, 1-10. https://doi.org/10.1016/j.drugalcdep.2014.07.014

Keng, S., Smoski, M. J., & Robins, C. J. (2011). Effects of mindfulness on psychological health: A review of empirical studies. *Clinical Psychology Review*, *31*(6), 1041-1056. doi:10.1016/j.cpr.2011.04.006

Kerr, S., Woods, C., Knussen, C., Watson, H., & Hunter, R. (2013). Breaking the habit: a qualitative exploration of barriers and facilitators to smoking cessation in people with enduring mental health problems. *BMC Public Health*, *13*(1). doi:10.1186/1471-2458-13-221

Khanna, S., & Greeson, J. M. (2013). A narrative review of yoga and mindfulness as complementary therapies for addiction. *Complementary Therapies in Medicine*, *21*(3), 244-252. doi:10.1016/j.ctim.2013.01.008

Khanna, S., & Greeson, J. M. (2013). A narrative review of yoga and mindfulness as complementary therapies for addiction. *Complementary Therapies in Medicine*, *21*(3), 244-252. doi:10.1016/j.ctim.2013.01.008

Killen, J. D., Fortmann, S. P., Newman, B., & Varady, A. (1990). Evaluation of a treatment approach combining nicotine gum with self-guided behavioural treatments for smoking relapse prevention. *Journal of Consulting and Clinical Psychology*, *58*(1), 85-92. doi:10.1037//0022-006x.58.1.85

Khayyer, Z., Saberi Azad, R., Dadjoo, M., & Shojaei, A. (2019). Transcranial direct current stimulation combining mindfulness-based relapse prevention for smoking cessation: A case report. *International Clinical Neuroscience Journal*, *6*(3), 118-122. https://doi.org/10.15171/icnj.2019.22

Killen, J. D., & Fortmann, S. P. (1997). Craving is associated with smoking relapse: Findings from three prospective studies. *Experimental and Clinical Psychopharmacology*, *5*(2), 137-142. doi:10.1037//1064-1297.5.2.137

Kiken, L. G., Garland, E. L., Bluth, K., Palsson, O. S., & Gaylord, S. A. (2015). From a state to a trait: Trajectories of state mindfulness in meditation during intervention predict changes in trait mindfulness. *Personality and Individual Differences*, *81*, 41-46. https://doi.org/10.1016/j.paid.2014.12.044

Klein, H., Sterk, C. E., & Elifson, K. W. (2013). Initial Smoking Experiences and Current Smoking Behaviours and Perceptions among Current Smokers. *Journal of Addiction, 2013*, 1-9. doi:10.1155/2013/491797

Klinke, M. E., & Jónsdóttir, H. (2014). Smoking addiction in chronic obstructive pulmonary disease. *Chronic Respiratory Disease*, *11*(4), 229-236. doi:10.1177/1479972314546764

Knoke, J. D., Burns, D. M., & Thun, M. J. (2007). The change in excess risk of lung cancer attributable to smoking following smoking cessation: an examination of different analytic approaches using CPS-I data. *Cancer Causes & Control*, *19*(2), 207-219. doi:10.1007/s10552-007-9086-5

Know Your Triggers. (n.d.). Retrieved from https://smokefree.gov/challenges-when-quitting/cravings-triggers/know-your-triggers

Kober, H., Brewer, J. A., Height, K. L., & Sinha, R. (2017). Neural stress reactivity relates to smoking outcomes and differentiates between mindfulness and cognitive-behavioural treatments. *NeuroImage*, *151*, 4-13. doi:10.1016/j.neuroimage.2016.09.042

Lancaster, T., Hajek, P., Stead, L. F., West, R., & Jarvis, M. J. (2006). Prevention of Relapse After Quitting Smoking. *Archives of Internal Medicine*, *166*(8), 828. doi:10.1001/archinte.166.8.828

Mannino, D. M. (2009). Why Won't Our Patients Stop Smoking?: The power of nicotine addiction. *Diabetes Care*, *32*(suppl_2), S426-S428. doi:10.2337/dc09-s353

Margolis, R., & Wright, L. (2015). Better Off Alone Than With a Smoker: The Influence of Partner's Smoking Behaviour in Later Life. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, *71*(4), 687-697. doi:10.1093/geronb/gbu220

McKay, A. J., Patel, R. K., & Majeed, A. (2015). Strategies for Tobacco Control in India: A Systematic Review. *PLOS ONE*, *10*(4), e0122610. doi:10.1371/journal.pone.0122610

Miles, M. B., Huberman, A. M., Huberman, M. A., & Huberman, P. M. (1994). *Qualitative Data Analysis: An Expanded Sourcebook*. Thousand Oaks, CA: SAGE.

Milton, B., Woods, S. E., Dugdill, L., Porcellato, L., & Springett, R. J. (2008). Starting young? Children's experiences of trying smoking during pre-adolescence. *Health Education Research*, *23*(2), 298-309. doi:10.1093/her/cym027

Mindfulness meditation trims craving for tobacco: 60percent reduction in smoking. (2019, August 21). Retrieved from https://www.sciencedaily.com/releases/2013/08/130805152418.htm

Mishra, G., Pimple, S., & Shastri, S. (2012). An overview of the tobacco problem in India. *Indian Journal of Medical and Paediatric Oncology*, *33*(3), 139. doi:10.4103/0971-5851.103139

Mishra, G., Pimple, S., & Shastri, S. (2012). An overview of the tobacco problem in India. *Indian Journal of Medical and Paediatric Oncology*, *33*(3), 139. doi:10.4103/0971-5851.103139

Mohan, P., Lando, H. A., & Panneer, S. (2018). Assessment of Tobacco Consumption and Control in India. *Indian Journal of Clinical Medicine, 9*, 117991611875928. doi:10.1177/1179916118759289

Nesbitt, P. D. (1973). Smoking, physiological arousal, and emotional response. *Journal of Personality and Social Psychology, 25*(1), 137-144. doi:10.1037/h0034256

Ng, D. M., & Jeffery, R. W. (2003). Relationships Between Perceived Stress and Health Behaviours in a Sample of Working Adults. *Health Psychology, 22*(6), 638-642. doi:10.1037/0278-6133.22.6.638

Niaura, R. (2000). Cognitive social learning and related perspectives on drug craving. *Addiction, 95*(8s2), 155-163. doi:10.1046/j.1360-0443.95.8s2.4.x

Niaura, R. (2000). Cognitive social learning and related perspectives on drug craving. *Addiction, 95*(8s2), 155-163. doi:10.1046/j.1360-0443.95.8s2.4.x

Niaura, R., Abrams, D. B., Shadel, W. G., Rohsenow, D. J., Monti, P. M., & Sirota, A. D. (1999). Cue exposure treatment for smoking relapse prevention: a controlled clinical trial. *Addiction, 94*(5), 685-695. doi:10.1046/j.1360-0443.1999.9456856.x

NIDA. 2020, June 9. Are there gender differences in tobacco smoking?. Retrieved from https://www.drugabuse.gov/publications/research-reports/tobacco-nicotine-e-cigarettes/are-there-gender-differences-in-tobacco-smoking on 2020, July 9

Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic analysis: Striving to meet the trustworthiness criteria. *International journal of qualitative methods, 16*(1), 1609406917733847.

Ockene, J. K., Mermelstein, R. J., Bonollo, D. S., Emmons, K. M., Perkins, K. A., Voorhees, C. C., & Hollis, J. F. (2000). Relapse and maintenance issues for smoking cessation. *Health Psychology, 19*(1S), 17-31. doi:10.1037//0278-6133.19.suppl1.17

Ortiz, A., & Grando, S. A. (2012). Smoking and the skin. *International Journal of Dermatology*, *51*(3), 250-262. doi:10.1111/j.1365-4632.2011.05205.x

Ostafin, B. D., & Marlatt, G. A. (2008). Surfing the Urge: Experiential Acceptance Moderates the Relation Between Automatic Alcohol Motivation and Hazardous Drinking. *Journal of Social and Clinical Psychology*, *27*(4), 404-418. doi:10.1521/jscp.2008.27.4.404

Ottney, A. R. (2011). Nicotine Conjugate Vaccine as a Novel Approach to Smoking Cessation. *Pharmacotherapy*, *31*(7), 703-713. doi:10.1592/phco.31.7.703

P Saha, S., K Bhalla, D., F Whayne, T., & Gairola, C. (2007). Cigarette smoke and adverse health effects: An overview of research trends and future needs. *International Journal of Angiology*, *16*(03), 77-83. doi:10.1055/s-0031-1278254

Page Not Found. (n.d.). Retrieved from https://med.dartmouth-hitchcock.org/documents/Urge-Surfing

Perkins, K. A., Parzynski, C., Mercincavage, M., Conklin, C. A., & Fonte, C. A. (2012). Is self-efficacy for smoking abstinence a cause of, or a reflection on, smoking behaviour change? *Experimental and Clinical Psychopharmacology*, *20*(1), 56-62. doi:10.1037/a0025482

Piper, M. E., Fiore, M. C., Smith, S. S., Fraser, D., Bolt, D. M., Collins, L. M., … Baker, T. B. (2015). Identifying effective intervention components for smoking cessation: a factorial screening experiment. *Addiction*, *111*(1), 129-141. doi:10.1111/add.13162

Potvin, S., Tikàsz, A., Dinh-Williams, L. L., Bourque, J., & Mendrek, A. (2015). Cigarette Cravings, Impulsivity, and the Brain. *Frontiers in Psychiatry*, *6*. doi:10.3389/fpsyt.2015.00125

Racey, D.N., Fox, J., Berry, V.L. *et al.* Mindfulness-Based Cognitive Therapy for Young People and Their Carers: a Mixed-Method Feasibility Study. *Mindfulness* **9,** 1063–1075 (2018). https://doi.org/10.1007/s12671-017-0842-7

Raja, J., & Bhasin, S. (2014). Health issues amongst call center employees, an emerging occupational group in India. *Indian Journal of Community Medicine*, *39*(3), 175. doi:10.4103/0970-0218.137156

Raloff, J. (1989). Pictures Show Smoking's Ill Effects on DNA. *Science News*, *135*(10), 151. doi:10.2307/3973543

Richman, P. B., Dinowitz, S., Nashed, A., Eskin, B., & Cody, R. (1999). Prevalence of Smokers and Nicotine-addicted Patients in a Suburban Emergency Department. *Academic Emergency Medicine*, *6*(8), 807-810. doi:10.1111/j.1553-2712.1999.tb01211.x

Ritchie, J., & Lewis, J. (2003). *Qualitative Research Practice: A Guide for Social Science Students and Researchers*. Thousand Oaks, CA: SAGE.

Roos, C. R., Stein, E., Bowen, S., & Witkiewitz, K. (2019). Individual gender and group gender composition as predictors of differential benefit from mindfulness-based relapse prevention for substance use disorders. *Mindfulness*, *10*(8), 1560-1567. https://doi.org/10.1007/s12671-019-01112-y

Rubinstein, M. L., Shiffman, S., Moscicki, A., Rait, M. A., Sen, S., & Benowitz, N. L. (2013). Nicotine metabolism and addiction among adolescent smokers. *Addiction*, *108*(2), 406-412. doi:10.1111/j.1360-0443.2012.04026.x

Saito, A., Nishina, M., Murai, K., Mizuno, A., Ueshima, F., Makiishi, T., & Ichinohe, T. (2010). Health professional's perceptions of and potential barriers to smoking

cessation care: a survey study at a dental school hospital in Japan. *BMC Research Notes, 3*(1). doi:10.1186/1756-0500-3-329

Salovey, P., Rothman, A. J., Detweiler, J. B., & Steward, W. T. (2000). Emotional states and physical health. *American Psychologist, 55*(1), 110-121. doi:10.1037//0003-066x.55.1.110

Schroeder, K., Lawlor, D. A., Montaner, D., & Ebrahim, S. (2006). Self-reported smoking cessation interventions were not associated with quitting in older women. *Journal of Clinical Epidemiology, 59*(6), 622.e1-622.e9. doi:10.1016/j.jclinepi.2005.09.011

Seo, D., Torabi, M. R., & Weaver, A. E. (2008). Factors Influencing Openness to Future Smoking Among Nonsmoking Adolescents. *Journal of School Health, 78*(6), 328-336. doi:10.1111/j.1746-1561.2008.00310.x

Short, N. A., Oglesby, M. E., Raines, A. M., Zvolensky, M. J., & Schmidt, N. B. (2015). Posttraumatic stress and emotion dysregulation: Relationships with smoking to reduce negative affect and barriers to smoking cessation. *Comprehensive Psychiatry, 61*, 15-22. doi:10.1016/j.comppsych.2015.05.007

Smith, P. M., Spadoni, M. M., & Proper, V. M. (2014). Abuse and smoking cessation in clinical practice. *Journal of Clinical Nursing, 23*(3-4), 361-366. doi:10.1111/j.1365-2702.2012.04219.x

Song, F., Huttunen-Lenz, M., & Holland, R. (2010). Effectiveness of complex psycho-educational interventions for smoking relapse prevention: an exploratory meta-analysis. *Journal of Public Health, 32*(3), 350-359. doi:10.1093/pubmed/fdp109

Spears, C. A., Hedeker, D., Li, L., Wu, C., Anderson, N. K., Houchins, S. C., … Wetter, D. W. (2017). Mechanisms underlying mindfulness-based addiction treatment versus cognitive behavioural therapy and usual care for smoking

cessation. *Journal of Consulting and Clinical Psychology*, *85*(11), 1029-1040. doi:10.1037/ccp0000229

Spek, V., Lemmens, F., Chatrou, M., Van Kempen, S., Pouwer, F., & Pop, V. (2012). Development of a Smoking Abstinence Self-efficacy Questionnaire. *International Journal of Behavioural Medicine*, *20*(3), 444-449. doi:10.1007/s12529-012-9229-2

Spek, V., Lemmens, F., Chatrou, M., Van Kempen, S., Pouwer, F., & Pop, V. (2012). Development of a Smoking Abstinence Self-efficacy Questionnaire. *International Journal of Behavioural Medicine*, *20*(3), 444-449. doi:10.1007/s12529-012-9229-2

Spek, V., Lemmens, F., Chatrou, M., Van Kempen, S., Pouwer, F., & Pop, V. (2012). Development of a Smoking Abstinence Self-efficacy Questionnaire. *International Journal of Behavioural Medicine*, *20*(3), 444-449. doi:10.1007/s12529-012-9229-2

St.Helen, G., Dempsey, D., Wilson, M., Jacob, P., & Benowitz, N. L. (2013). Racial differences in the relationship between tobacco dependence and nicotine and carcinogen exposure. *Addiction*, *108*(3), 607-617. doi:10.1111/j.1360-0443.2012.04077.x

Tashakkori, A., & Teddlie, C. (2010). *SAGE Handbook of Mixed Methods in Social & Behavioural Research*. Thousand Oaks, CA: SAGE.

Taylor, G., McNeill, A., Girling, A., Farley, A., Lindson-Hawley, N., & Aveyard, P. (2014). Change in mental health after smoking cessation: systematic review and meta-analysis. *BMJ*, *348*(feb13 1), g1151-g1151. doi:10.1136/bmj.g1151

Tombor, I., Neale, J., Shahab, L., Ruiz, M., & West, R. (2015). Healthcare Providers' Views on Digital Smoking Cessation Interventions for Pregnant Women. *Journal of Smoking Cessation*, *10*(2), 116-123. doi:10.1017/jsc.2014.6

Tran, T., Reeder, A., Funke, L., & Richmond, N. (2013). Association Between Smoking Cessation Interventions During Prenatal Care and Postpartum Relapse: Results from

2004 to 2008 Multi-State PRAMS Data. *Maternal and Child Health Journal*, *17*(7), 1269-1276. doi:10.1007/s10995-012-1122-8

Ussher, M., Cropley, M., Playle, S., Mohidin, R., & West, R. (2009). Effect of isometric exercise and body scanning on cigarette cravings and withdrawal symptoms. *Addiction*, *104*(7), 1251-1257. doi:10.1111/j.1360-0443.2009.02605.x

Vidrine, J. I., Spears, C. A., Heppner, W. L., Reitzel, L. R., Marcus, M. T., Cinciripini, P. M., … Wetter, D. W. (2016). Efficacy of mindfulness-based addiction treatment (MBAT) for smoking cessation and lapse recovery: A randomized clinical trial. *Journal of Consulting and Clinical Psychology*, *84*(9), 824-838. doi:10.1037/ccp0000117

Volpp, K. G., Troxel, A. B., Pauly, M. V., Glick, H. A., Puig, A., Asch, D. A., … Audrain-McGovern, J. (2009). A Randomized, Controlled Trial of Financial Incentives for Smoking Cessation. *New England Journal of Medicine*, *360*(7), 699-709. doi:10.1056/nejmsa0806819

West, R. (2017). Tobacco smoking: Health impact, prevalence, correlates and interventions. *Psychology & Health*, *32*(8), 1018-1036. doi:10.1080/08870446.2017.1325890

Westbrook, C., Creswell, J. D., Tabibnia, G., Julson, E., Kober, H., & Tindle, H. A. (2013). Mindful attention reduces neural and self-reported cue-induced craving in smokers. *Social Cognitive and Affective Neuroscience*, *8*(1), 73-84. doi:10.1093/scan/nsr076

Weiss de Souza, I. C., Kozasa, E. H., Bowen, S., Richter, K. P., Sartes, L. M.,

Colugnati, F. A., & Noto, A. R. (2020). Effectiveness of mindfulness-based relapse prevention program as an adjunct to the standard treatment for smoking: A pragmatic design pilot study. *Nicotine & Tobacco Research*. https://doi.org/10.1093/ntr/ntaa057

What Are My Smoking Triggers? Emotions, Stress, Habit, and Social Situations. (2016, December 22). Retrieved from https://www.webmd.com/smoking-cessation/find-smoking-triggers#1

https://www.who.int/news-room/fact-sheets/detail/tobacco

https://www.who.int/tobacco/surveillance/survey/gats/GATS_India_2016-17_FactSheet.pdf?ua=1

World Health Organisation. (2010). WHO | Gender, women, and the tobacco epidemic. Retrieved from https://www.who.int/tobacco/publications/gender/women_tob_epidemic/en/

Witkiewitz, K., & Marlatt, G. A. (2004). Relapse Prevention for Alcohol and Drug Problems: That Was Zen, This Is Tao. *American Psychologist, 59*(4), 224-235. doi:10.1037/0003-066x.59.4.224

Wray, J. M., Gass, J. C., & Tiffany, S. T. (2013). A Systematic Review of the Relationships Between Craving and Smoking Cessation. *Nicotine & Tobacco Research, 15*(7), 1167-1182. doi:10.1093/ntr/nts268

Wynd, C. A. (1992). Relaxation imagery used for stress reduction in the prevention of smoking relapse. *Journal of Advanced Nursing, 17*(3), 294-302. doi:10.1111/j.1365-2648.1992.tb01907.x

Xiao, Q., Yue, C., He, W., & Yu, J. (2017). The Mindful Self: A Mindfulness-Enlightened Self-view. *Frontiers in Psychology*, *8*. doi:10.3389/fpsyg.2017.01752

Yong, H., Borland, R., Thrasher, J. F., & Thompson, M. E. (2012). Stability of Cigarette Consumption Over Time Among Continuing Smokers: A Latent Growth Curve Analysis. *Nicotine & Tobacco Research*, *14*(5), 531-539. doi:10.1093/ntr/ntr242

Zgierska, A., & Marcus, M. T. (2010). Mindfulness-Based Therapies for Substance Use Disorders: Part 2. *Substance Abuse*, *31*(2), 77-78. doi:10.1080/08897071003641248

Publications and Presentations

Vadivale, A. M., & Sathiyaseelan, A. (2019). Mindfulness-based relapse prevention – A meta-analysis. *Cogent Psychology*, *6*(1). doi:10.1080/23311908.2019.1567090

Vadivale, A. M., & Sathiyaseelan, A. (2017). Mindfulness and mental health amongst working women. 5th World Congress on Women and Girl Child-15 October 2017, biogenesis Health Cluster, www.wgcbiogensis.com

Vadivale, A. M., & Sathiyaseelan, A. (2019). Mindfulness Based Relapse Prevention on Nicotine Dependent Working Women. Worldwomenscongress.com

Appendix

Time line of study

Details	Time Line
Advertisement	2 nd Feb 2018 onwards to Jan 2019
Initial Screening of participants /Info about program	Sept/ October 2018

Selection / Consent	Dec 2018
Screening tools	Jan 2019
Counselling and Interview Participants set quit date	13-2-2019-15-2-2019
Abstinence	13-2-2019-15-2-2019
Pre test	20-2-2019
Sessions	
1	21-2-2019
2	28-2-2019
3	7-3-2019
4	15-3-2019
Interview	16-3-2019 to 19-3-2019
5	21-3-2019
6	28-3-2019
7	4-4-2019
8	11-4-2019
Post test	12-4-2019
Interview	12-4-2019 to 14-4-2019
Follow up 1	19-4-2019/ 20-4-2019
Follow up 2	10-5-2019- 15-5-2019
Follow up 3	12-6-2019- 15-6-2019
Follow up 4	19-10-2019- 2-11-2019

Session Details

Session I

Automatic Pilot and Relapse

The first session focuses on automatic pilot and its association with relapse. Examples given in this session will pertain to helping clients understand what it means to act without awareness, and to throw light on how acting without awareness is linked to having a relapse. An introduction is given about MBRP and what mindfulness is all about. Body scan meditation is used to bring about an understanding of awareness amongst the group.

Session Outline

1. Introduction
2. Expectations and Rules
3. Group Structure
4. Exercise Number 1 – Raisins exercise
5. Introduction to Mindfulness
6. Body Scan Meditation
7. Home Practice
8. Closing

1. Introduction

The purpose of this part of the session would be to break the ice between the participants in the group and give them a brief overview of the program.

As the program facilitator, you will have to introduce yourself briefly, and welcome the participants to the program. Make the participants introduce themselves next. Also, give them the space to share information on what is motivating them to attend the group session. You, being the facilitator, will need to remember that the tone for the group is set in this session and you will have to create a safe space for the group.

Discussion points with participants:

1) What do you value most by being here?
2) What changes/shifts would you want to see if these sessions helped you?

Understanding the participants' motives for joining the group will set a foundation on which you can move forward with the remaining sessions of the program. It is good to keep in mind that each participant may come in with his/her unique reason for wanting to quit. All participants should be made to feel that their reason is as important as those of the others. Please note to not take too much time on this part. Make the introductions as brief as possible.

Outcome: The outcome of the introduction would be for the group to get to know you and each other, as well as for you to understand the group better, so that you can proceed further with the session.

2. Expectations and rules

Each group will come in with their own set of expectations. You, as the facilitator, will need to discuss the expectations of the group at the start of the program. Discuss the following topics with the group.

The following points will have to be covered.

1) Consistency in attendance
2) Notification to the facilitator in advance, in case of absence
3) Compensation for sessions

4) Commitment to therapy
5) Honesty
6) Confidentiality
7) Non-judgmental attitude
8) Respect for other group members.

In the course of the discussion, you being the facilitator, could work at bringing out group engagement and participation. Every member should have an opportunity to speak and be heard by other members.

Outcome: These discussions would strengthen the group and bring about a sense of respect and commitment.

3. Group structure

Understanding group structure would be the agenda of this portion of the session.
You will need to explain the idea of having a closed group structure. Here, individual participants will not be allowed to join the group mid-way into sessions. The importance of keeping up with timing and the proceedings of the sessions, with the number of breaks in each, will be discussed. Emphasis has to be given to the fact that all sessions are structured to be experiential, and all discussions will focus on the present moment. Participation will be expected from all.

You will also discuss with the participants about home practice and worksheets, and make the group understand the importance of each week's worksheet and home practice. The participants will have to understand that the sessions only introduce a technique, and the course becomes more powerful with regular practice. Inform participants that attending all sessions is mandatory, as each session builds on the previous one, and missing one session would hold the participant back by a whole week.

Outcome: The participant by now would know how the group operates and how he/she, as a member, will contribute to the group. The participants will also know that each one is expected to adhere to group rules and home practice and completion of worksheets each week is part of those rules.

4. Exercise Number 1 – Raisins exercise

The raisins exercise is a popular one in mindfulness therapy. Just as both MBSR and MBCT use this as their first experiential exercise, so does MBRP. This exercise helps participants understand what it means to mindfully engage in an activity that is done daily without any awareness.

Participants have to be given a bowl each, containing five raisins. They are then asked to eat one raisin at a time. The first raisin is eaten normally. The participants will then have to eat the second raisin slowly and mindfully, they can take their time thinking about how the raisin tastes, its texture, how it feels against the tongue and palate. Ask the participants to remain in the moment and be aware of the experience.

You will instruct the participants in the following areas.

1) Seeing the raisin
2) Touching the raisin
3) Holding the raisin
4) Smelling the raisin
5) Placing the raisin in the mouth
6) Feeling its texture
7) Chewing the raisin slowly
8) Tasting the raisin
9) Swallowing it
10) Following through

You could either use an audio file for the raisin exercise, or read a pre-defined script. Scripts are also available for the same online.

Discussion points with participants post-exercise.

1) What did you notice?
2) What difference did you notice between the first and second raisin?
3) Were you surprised by anything?
4) Did you notice any thoughts or emotions arise?
5) What did the exercise feel like?

Probe deeper using participants' replies as the base.

1) Describe autopilot and discuss other situations in which a person may be in autopilot mode, specifying it to smoking experiences.
2) How does autopilot relate to relapse?
3) The intention of the exercise is not to teach but to create awareness of the tendency to live on autopilot.
4) Themes are developed through discussion.
5) Why is this exercise being done in a relapse prevention group?
6) How do you think this is related to relapse or addiction to smoking?
7) Slowing down, bringing awareness, might reduce autopilot and help us make more appropriate choices.

Outcome: This exercise would make participants focus on awareness of sensation, thoughts, and emotions, and they will get to understand such areas with specificity to running on autopilot mode and how this relates to having a relapse.

5. Introduction to Mindfulness

Now that the participants have a little more understanding of what mindful awareness is, due to the raisin exercise, you will have to now make them describe their understanding of the same. You will need to bring in the real meaning of mindfulness at this point.

Discussion points with participants.

1) Ask participants to describe what mindfulness is according to them?
2) Explain what is mindfulness: being in the moment, paying attention in a particular way: on purpose, in the present moment, and non-judgmentally.

You can enumerate on the fact that mindfulness is not only about being aware and paying attention to what is presently happening, it also is about not judging and being compassionate. Participants will be made to notice things with curiosity, rather than with judgement. Curiosity is brought in regardless of whether the experience is pleasant or unpleasant. Aversion to unpleasant and craving for pleasant experiences are normal reactions, but not appraising the experience helps break the aversion and craving routine.

Outcome: The participant understands the true meaning of mindfulness and erases any misconceptions of the same.

6. Body scan meditation

After an understanding is given about the program structure and mindfulness, body scan meditation is introduced. Just like in the MBSR and MBCT programs, this will be the first formal meditative exercise being introduced. Body scan meditation focuses on increasing an individual's attention to the physical sensations of the body.

In this exercise, you will have to make the participants pay attention to their physical experiences. This is particularly valuable amongst cigarette smokers as experiences of reactivity, cravings, and urges are often seen to emerge physically, before they form thoughts and reactions.

Make your participants be seated in a comfortable position on the chair or floor and conduct the body scan meditation for 30 minutes. You will have to guide them through the meditation by either reading a pre-defined script or by using anybody to scan audio or video files that are available online.

Discussion points with participants

1) What were your observations and experiences?
2) What did you notice that was relaxing to your body and mind?
3) Did anyone notice your mind wandering off to other things?
4) What was your reaction to mind wandering?
5) When you have a thought, complete it and slowly bring your attention back to the body again. Mindfulness is not about not having thoughts, but rather of being aware of what is happening
6) Have you felt the struggle to stay awake?
7) Give examples on how you, as a facilitator, overcame such challenges by experiencing the present moment rather than doing it right and trying to fix it.

Outcome: The participant will understand his/her bodily sensations better after this exercise and will be more aware of physical experiences. All thoughts and judgements on whether or not the participant is meditating the right way will be cleared during the discussion. Difficulties in meditation will also be discussed and cleared here.

Home Practice

Participants have, at the start of the course, been made to understand the importance of practicing mindfulness at home.

In this part, you will introduce the daily practice tracking sheet to the participants. The tracking sheet will consist of the date, how many minutes of practice, mindfulness of daily activities where the participant notes down daily activities where he/she was mindful,

and observation or comments. Formatted tracking sheets are available or you can make your own and pass it on to the participants.

As the facilitator, you will have to encourage the participant to practice mindfulness every day and links to an online guided meditation program, or CD's, will have to be given to them before the end of the session. Tell the participants that they are expected to carry out at least one activity every day mindfully. Emphasis should be given again on the importance of home practice.

Discussion points with participants

1) Emphasis is given on non-judgmental environment - analogy used to get a skill one must practice every day. The practice is the core part of the program, and participants' commitment to regular practice is a must.
2) Explain in detail, using appropriate smoking-related examples, in the daily practice tracking sheet
3) Mindfulness daily- Ask the participants to pick any one activity daily and do it mindfully using the learning from the raisin exercise.

Closing

You can close the session by making participants remain in mindful silence for 5 minutes, after which you conclude the session with the ring of a soft bell.

Session 2

Awareness of Triggers And Cravings

When it comes to nicotine dependence, there is a difficulty for individuals to understand their impulsive behaviour towards smoking. This session focuses on being aware of triggers and experiencing them without automatically reacting to the same. Participants at this stage understand triggers, when they may get them their physical sensations, thoughts and

emotions when they get a craving, and eventually how they behave. Awareness is brought about at this stage to identify triggers and break the automatic reactivity to it.

Session Outline

9. Starting the session
10. Body Scan Meditation
11. Review of Homework
12. Exercise number 1- Walking down the street
13. Exercise Number 2- Urge surfing
14. Mountain Meditation
15. Home Practise
16. Closing

1. **Starting the Session**

   Every session will have a check-in, where you being the facilitator, will bring the participants' attention to here and now.

   You can check in with the group by asking each participant in a line to explain how they feel at the moment. This would be a brief one-to-two-word check-in that should not take too much time.

Outcome: by checking in on the participants you will bring the participants' attention to how they feel at that moment.

2. **Body Scan Meditation**

After being introduced in the last half of the previous week's session, now body scan meditation is brought in at the start of the session. The main aim here would be to give the

group experiential learning of the course, and also to bring the participants' attention to how they feel at the moment, and understand their physical sensations at the start of the session. You will guide the group through a 20 to 30 minutes of body scan meditation. This can be done using the same audio or pre-defined script you had used the previous week.

Outcome: the participants will be brought into awareness of how they are feeling at that point of time, and this will reinforce the sense of experiential learning within themselves.

3. **Review of Home-Work**

As emphasised in the previous session, home practice is extremely important to follow. This is brought about by discussing the previous week's home practice and worksheets. Participants who have completed their worksheets can reinforce their efforts by discussing their homework, and motivation can be given to those who have not taken the same seriously.

You will need to check the completion of worksheets at this stage, acknowledge participants who have put in the effort to complete the worksheets and discuss with the group if they faced any challenges.

Discussion points with participants

1. Aversion

Aversion arises out of physical discomfort. Participants may have experienced confusion, doubt, and disappointment during practice. You, being the facilitator, may have to emphasize on increasing awareness and acceptance of all phenomena. Make participants understand the need to becoming curious about all phenomenon, including discomfort and creating space for difficult experiences. Explain the idea of becoming aware of sensations even if it’s of discomfort through meditation, and not focussing on breath alone. Bring this forward by explaining about a craving, and how we succumb to a craving to avoid discomfort. Mindfulness is not about evading such discomfort but forming a different kind of a relationship with it. This gives no scope for aversion to anything unpleasant.

2. Craving and Desire

Almost all acts of smoking start from a craving or desire. Craving and desire will be explained through longing for peacefulness and relaxation. Participants may expect meditation to bring about peace and relaxation. You will have to bring about understanding that meditation need not immediately bring about peace and relaxation. The core of mindfulness practice is to increase awareness and bring a non-judgemental attitude toward any kind of experience, may it be good or bad, relaxing or unpleasant

3. Restlessness and Agitation

In the beginning, there is a likelihood for participants to feel restless while meditating. This could be both physical and mental restlessness. You will need to talk to the participants about their levels of anxiety to those who are unable to, or not accustomed to, being seated quietly. Those participants who are anxious or restless are asked not to suppress it, but rather acknowledge restlessness and approach it with curiosity rather than aversion.

Drowsiness / Sleepiness

Almost all participants at the beginning stages of mindfulness will feel drowsy or sleepy. This will be the time to bring participants' attention to observing the present movement including sleepiness and encourage curiosity about the quality of the present moment and the mind's reaction to it. Make your participants understand that falling asleep during meditation is not wrong and that it is a normal process. There is no need for judgement; rather one can simply bring their attention back to the present moment, even if that moment is them experiencing sleepiness. Bring about a curiosity about how the mind reacts to this experience.

4. Doubt

You will need to remember that doubts may arise in various forms. One may even doubt the benefits of the practice itself. There will be various levels of self-judgement in the participants. Make your participants understand that whatever feelings and thoughts come in

the way of the practice can be let go of without judgement. Mere observation of such sensations, thoughts, or feelings will suffice.

Outcome: The participants gain a deeper understanding of the challenges faced in practicing mindfulness and are more confident by knowing that they are not facing such challenges alone. Thus, doubts about the practice reduce.

4. Exercise number 1- Walking down the street

This exercise focuses on making participants identify thoughts, emotions, physical sensations, and urges that follow an ambiguous stimulus.

You could do this exercise in two ways. You could either ask the group to walk down the street being mindful about each step they are taking. Experiencing the walk, how the floor feels on their foot, the movement of each limb, the surroundings, the sensations in their body, etc. You could also make the participants sit comfortably on a chair and guide them through the experience of them walking down a familiar road. You will have to use a pre-written script for this.

Discussion points with participants

1) Tell me what were your thoughts and images through this exercise. You could write this down on a whiteboard making a differentiation between thoughts, emotions, and sensations.
2) Differentiate interpretations that participants may make from facts.
3) What did you experience and notice in the exercise?
4) Emphasise to the participants how an interpretation affects thoughts and emotions and how automatic this process is.

Outcome: This exercise prepares the participant for the next exercise. The participant is now able to understand how to differentiate a thought, an emotion, and a sensation.

5. Exercise Number 2- Urge surfing

This exercise focuses on craving and how to explore a craving more curiously. This exercise looks deeper into a craving, observing the physical sensation that it may create followed by thoughts and the overwhelming feeling that follows, which in turn brings about a reaction. In this exercise, participants are made to change the reaction from being automatic to being curious and compassionate.

Have your participants pick a scenario that is challenging but not too challenging or stressful for this exercise. Once you get them to picture their particular challenge, ask them to pause. After a small pause, have your participants think of the emotions, thoughts and bodily sensations they experience at that moment, but instruct them not to react to it. To bring curiosity and not reactivity, and to practice observing just like they did in the raisin and body scan exercises. You will guide them through this exercise using an audio file or a pre-written script. Information on scripts is available on the internet.

Discussion points with participants

1) What was your experience through the exercise?
2) What were your thoughts?
3) How did this exercise make you feel?
4) What were the sensations you felt through this exercise?

After the exercise, you will bring out the metaphor of urge surfing to the participants. Make aware to the participants that they may feel that once a craving begins and there is that urge to smoke, the craving will continue to increase in intensity until one acts on it, or stops it somehow by indulging in the act of smoking. Craving for a cigarette is seen to move higher until one eliminates it by actually smoking. In reality, craving is like a wave; it rises to the peak and subsides. One way to feed a craving is to smoke, which in turn may bring relief, but the relief is short-lived like quenching thirst by drinking salt water. Fighting the craving would be another way to control it, but when cravings are suppressed, they tend to become

stronger. What happens when you stay right with it? Each time the craving is reduced, we get more confident and attain the ability to last out through the craving.

Outcome: The participants are able to understand their cravings better. The rise and fall of a craving and how experiencing a craving, understanding how he/she feels, what he/she thinks and his/her bodily sensations, without reacting to it helps them gain confidence when the next craving comes up, thus breaking the cycle of reactivity.

6. Mountain meditation

As the urge surfing exercise may have brought discomfort to the participants you will now guide the participants through mountain meditation. This meditation will help bring to mind qualities of stability, strength, and dignity. Scripts for mountain meditation are available. You will have to make your participants seat themselves comfortably and meditate, visualizing a mountain. They will bring to mind qualities of stability, strength, and dignity, and these qualities are made to merge with the image of the mountain.

Outcome: the uneasy feeling after urge surfing reduces and a sense of stability is brought back into the group.

7. Home practice

The home practice exercises need to be discussed for the next week.

Discussion points with participants

1) Body scan – You could give the participants a CD for guided body scan meditation or an online link for a 30-minute practice daily.
2) Daily activity mindfulness – Ask the participants to choose any one activity to be done mindfully every day
3) Noticing triggers worksheet - This worksheet contains columns that need to be filled by the participant. You can give out worksheets to the participant to fill in. The worksheet can have the following columns:

Date	Situation/trigger to smoke	What sensations did you experience	What was your mood, feeling or emotion/s	What were your thoughts during the situation	What did you do?

4) Daily practice tracking sheet

8. Closing

End your session by asking the participants to describe how they feel in one or two words. Session closes with 5 minutes of silence and ringing of the bell.

SESSION 3

MINDFULNESS IN DAILY LIFE

Awareness opens an individual's eyes to make better life choices. Mindfulness meditation brings about an awareness that helps practitioners make the right choices. This week the session focuses on understanding how focusing on the breath brings an individual back to being in the present and brings awareness to the body. The introduction to SOBER breathing space helps the participants understand how to function with their craving to smoke.

Session Outline

17. Starting the session
18. Awareness of Hearing
19. Review of Homework

20. Breathing Meditation
21. SOBER Breathing Space
22. Home Practise
23. Closing

1. Starting the Session

The basic aim is to start with the session by bringing the participants' attention to the here and now, that is the present moment. You can do this by having the participants describe one or two things they notice at that minute, such as sensations, emotions or thoughts. You can also check what is important for them to focus on in today's session.

Outcome: The outcome of doing this small exercise would be to bring the participants into the session by focusing on what's immediately happening.

2. Awareness of Hearing

The idea of mindfulness is not limited to concentrating on breath alone. It also involves bringing such learning into one's day to day life. This part of Session 3 aims to start with that transition. This meditative process has a similar intention as that of the body scan meditation. It differs in the context of indulging in the sense of hearing alone.

You will guide the participants through a brief hearing meditation bringing your participants' attention to sounds from outside and inside their body, even the faintest of sounds. While you bring your participants attention to various sounds, you will need to instruct them not to analyse the sound but to simply notice it. Tell your group that if they start thinking about the sound, to bring back their attention to simply experiencing it. You can use a script for this exercise. Do not make it too long.

Discussion points with participants

1) What did you notice in this exercise?

2) Probe on self-judgement in case someone says they were unable to concentrate, or label themselves or find difficulty in making sense of the noise.

3) Inform participants that this can be practiced anywhere and how such awareness helps the mind not to immediately judge, label or categorize, and how it is normal for the mind to do so.

4) You can bring about the concept of auto-pilot and make participants understand even with hearing, how we go into autopilot and become unaware of the sounds around us.

Outcome: Participants will understand how to focus on a particular sense like hearing without trying to make sense of it. Through the discussion, they will understand more about how they function in autopilot most of the time.

2. Review of Home -Work

Reviewing home practice will help discuss the experience of the participants after having practiced body scan meditation for the last two weeks. Their experiences tend to come out through discussions. Also, doubts about homework are clarified.

Discussion points with participants

1) What was the experience with the body scan over the week?

   Probe: your focus has become better or worse?

2) What are the challenges you experienced?

3) How is the practice helping you with your cravings/ urges?

This helps to prepare participants facing high-risk situations by closely observing the reactions that feel overwhelming.

4) What have you understood from the noticing trigger worksheet?

5) How do you feel with what you have noticed?

6) What is your response to this experience?

7) Inform participants that we focus on the reactions and responses more than the situation that triggered a craving. Participants need to be advised to bring the focus back to themselves instead of others or the situations.

8) What was your reaction to the craving at first? Was it physical? Was it to do with your thoughts or urges?

9) Can someone share an experience from the worksheet?

Outcome: The outcome of this discussion gives an in-depth understanding to the participant about their craving and how they react to it. Also discussing experiences gives participants more confidence in the process and understanding of other ways of looking at a craving.

3. Breathing Meditation

In mindfulness, posture helps in reflection of the practice. The aim here is to bring the participants to understand which posture is comfortable for them. This should help them relax and be alert. Too harsh a posture can bring about stiffness and too lazy a posture could bring about sleep and drowsiness. This helps in waking up to present experiences and bringing about increased awareness.

As a facilitator, you will guide your participants through the practice of formal sitting meditation. This is done for helping participants find an appropriate posture that supports a

relaxed alertness and a sense of dignity and self-respect. Emphasize to your participants that the main aim of this meditation is to observe, experience, and extend time in meditation. You can guide them by reading out scripts for breathing meditations. Be aware of your tone and pace at which you guide your participants. You could also use audio files that are available.

Discussion points with participants

1) What did you notice about your mind when you did this exercise?
2) Discuss with participants how the mind could wander off but they can gently bring it back to their breath.

Outcome: The breathing meditation brings about awareness of breath. It also helps participants understand which posture works best for them to gain the most of their meditative process. Discussion also brings about an understanding of the wandering mind and how to handle it.

5.SOBER breathing space

Individuals who smoke regularly mostly sustain the habit by working on autopilot. They do not assess cravings and are unaware of their triggers. When it comes to smoking especially, the temporary relief is better than the displeasure of a craving. SOBER breathing space becomes an important learning in such circumstances. Now that the participants can identify their triggers, SOBER breathing is introduced to handle the same. This technique mainly aims at teaching participants to step out of autopilot especially during high-risk situations

You will need to discuss SOBER breathing Space with your group. Explain to them what it means.

S- stop/ slow down and choose to move out of being in autopilot.

O – observe what is happening at the present moment with the body, emotions, and thoughts.

B- breathe, and focus on your breath

E- expand awareness of your body as well as the situation you are in

R- respond with awareness

Once you give them a detailed explanation of what SOBER breathing is, take them through the steps again by asking them to process each step with their own high-risk situation.

Outcome: After this explanation, the participants will be able to move out of autopilot and face a craving in a high-risk situation. This specifically works well after a trigger is identified and a craving starts to form.

6. Home practice

Before closing the session, you will need to discuss homework with the participants for the next week.

1) A daily practice tracking sheet

2) Sitting meditation 6 out of 7 days. You can guide participants with audio or video files on breathing meditation.

3) SOBER breathing space 3 times daily- Participants need to be asked to practice SOBER breathing space at least thrice a day. You could give them a handout explaining what SOBER breathing space is in case they forget.

4) Trigger identification sheets can also be given to participants if needed.

7. Closing

You can end your session with 5 minutes of silence followed by the sound of a bell for participants to disperse.

SESSION 4

MINDFULNESS IN HIGH-RISK SITUATIONS

Participants have been introduced to SOBER breathing space in the previous session. Participants have identified situations that are challenging for them and which conclude in succumbing to the situation by smoking. In this session, you will focus on helping participants stay in the present, especially during these high-risk situations, by understanding the situation differently and altering the way they look at such situations. This is done by not acting automatically, but by being more aware of the situation.

Session Outline

1. Starting the session
2. Awareness of Seeing
3. Review of Homework
4. Sitting Meditation
5. Risks of Relapse
6. SOBER Breathing Space in Challenging Situations
7. Walking Meditation

8. Home Practise
9. Closing

1. Starting the session

As in other sessions, you will start this session by asking participants to share a one-or-two-word description of their present moment experience. Emphasise to the participants that the mind normally would prepare a response due to it anticipating its turn, but focus on the participants should be on what they feel when it is their turn to speak. This will bring their focus to the present moment of the session.

2. Awareness of Seeing

The previous session focused on mindfulness in daily life by introducing awareness of hearing. This week you will continue the same by introducing awareness of seeing. You will guide the participants to look outside and be aware of what they are seeing. They can focus on objects, colours, texture, shapes, etc. As perception is selective and filtered, here participants will be trying to break that by being aware of everything they are seeing. Tell participants that the mind may start analyzing and being critical, it is okay to just observe what the mind is saying. In case you do not have a window or there is no option of actually going out to observe, you can get your participants to observe the room or take them through a guided meditation.

Discussion points with participants

1) How did this exercise make you feel?
2) Did your mind start labelling or categorizing everything you focused on?
3) How did you react to these thoughts?

Outcome: By the end of this exercise, participants will be aware of the fact that the mind works on its own and at times there is no control. By just observing thoughts, one can start controlling the mind, instead of the mind controlling them.

2. Review of Homework

By reviewing homework, you will be able to understand your participants better, how they have coped with sitting meditation and SOBER breathing space.

Discussion points with participants

1) What was your experience while practicing sober breathing space and sitting meditation?
2) Review of home practice tracking sheet.

Outcome: Repeated reinforcement is given to participants that the idea of mindfulness is to just be aware, and not to experience the expected levels of calmness and relaxation. This understanding helps reduce doubts about the process.

3. Sitting Meditation

This sitting meditation focusses on sound, breath, sensation and thought, an upgrade from the last session which only focussed on the breath. This aims at expanding awareness to all senses.

You will need to guide the participants through sitting meditation. Bring their attention to the sounds around them, their breath, their sensations and then their thoughts. You could use scripts made for sitting meditation or audio files for this exercise. The challenges faced by the participants will have to be discussed after the meditation takes place.

Discussion points with participants

1) What have you observed over the last week? What have you noticed?
2) What are the changes you have noticed over the past few weeks in line with your practice?

   Emphasis is given on the fact that the mind would wander, but the intention is to bring the mind back. The main aim is to observe the mind, get to know the mind better, and watch the mind react to things that come up during practice.
3) Would you like to share some recent record that you have had, or risky situations you have been in, using the noticing trigger worksheet? (Write few responses on the board and reflect on the responses with the participants)

Outcome: When it comes to sitting meditation, participants' awareness slowly moves to other senses than just breathing. Participants are more aware during meditation of sounds, thoughts, and sensations along with their breath.

4. Risk of Relapse

Before you move to introduce SOBER breathing space in challenging situations to the participants, it is necessary to make them understand personal and common risks for relapse. Each participant may have tried to quit smoking in the past. They may have failed for various reasons. This could also be their first time trying to quit the habit. There could be different reasons for individual participants to relapse and also more common reasons for the same which you will discuss in this session.

You will discuss common reactive patterns that make individuals fall back on their smoking habits.

Discussion points with participants

1) Could you share some triggers you have felt recently or situations where you have been at risk of smoking? You could look into your triggers worksheet if needed. (write responses on a whiteboard)
2) What do you feel could probably be the top three situations for a relapse?

Outcome: Highlighting these triggers into different broader categories like challenges, social pressure, interpersonal conflict, will help bring awareness to both the individuals' unique patterns as well as more common patterns for relapse behaviour.

5. SOBER breathing space in a challenging situation

After understanding a relapse situation, participants are brought to experience how SOBER breathing space would work in such a situation. This part of the session focuses on making participants understand what they could do to resist smoking when a challenging situation arises.

You will have to ask your participants to think of a situation where they recently felt like having a cigarette. Participants may be confused as to which scenario to pick. Any scenario that elicits a reactive behaviour will work well for this exercise. You will ask the participants to imagine and visualize the scene vividly. Make them pause right at the brink of where they normally become reactive, and conduct the SOBER breathing space exercise for them as done the previous week. Thus, you will be breaking autopilot and bringing in awareness. You will bring in awareness of their feelings, and tell them that feelings are not fixed.

Discussion points with participants

1) What was your experience?
2) How will this help when integrated with daily life?
3) What would it be like to do this in a different situation?
4) What would make it hard for you to follow this in such situations?

5) How would you work with that/ how would you remember to practice this in what situations?
6) Can you imagine this being a useful practice for you?

Outcome: Participants understand now how a trigger is developed, and how they would normally react to it causing a relapse. Using SOBER breathing space at the right moment, they are aware of how reactivity changes and they behave differently. This is more an experiential training for them.

6. Walking Meditation

Walking is seen to be one activity which is normally carried out by all without any awareness. It becomes an automated process. This exercise aims to change an automated process such as walking into one which has more awareness.

This exercise can be done both formally within the premises or a restricted outdoor area or informally in a larger space. Guide the participants to walk mindfully, walking slowly with awareness. Lead the exercise by telling participants that they may feel silly, awkward or even self-conscious. You will ask them to be aware of what they are feeling and let it go. They need not hold onto the feeling but slowly bring their focus back on the walk. You can also start the exercise in a smaller area and then move onto a larger area.

Discussion points with participants

1) What did you feel during this exercise?
2) How did you feel your mind wandering off while walking?
3) How did you bring attention back to walking?

Outcome: The participant can convert a very automated activity such as walking into one which has great amounts of awareness and focus.

7. Home practice

The home practice for the next week is discussed before the close of the session.

1) Sitting meditation or body scan meditation
2) Walking meditation twice a week
3) Sober breathing - challenging experiences arise
4) A daily practice tracking sheet.

8. Closing

You can end your session with 5 minutes of silence followed by the sound of a bell for participants to disperse.

9.

SESSION 5

ACCEPTANCE AND SKILLFUL ACTION

Session Outline

24. Starting the session
25. Sitting Meditation
26. Review of Home work
27. SOBER Breathing Space and its Use
28. Acceptance and Skilful Action
29. Home Practise
30. Closing

1. Starting the session

Welcome the participants to share one or two words on their present moment feelings or sensations.

2. Sitting Meditation

In the previous session, participants were introduced to sitting meditation, introducing sound, breath, sensation, and thought. This session aims to introduce emotion also into the meditation process. Focus is brought to discomfort, resistance, or tension.

When you guide the participants through this part of the session, you will bring focus on discomfort or any experience that is associated with resistance or tension. Make participants understand the acceptance of all these experiences, whether pleasant or unpleasant, invited or uninvited. Use poetry to convey the essence of the practice. The poem ‘The Guest House' by Rumi helps participants in accepting or tolerating challenging experiences.

Discussion points with participants

1) What did you feel while hearing the ‘guest house’?

2) What can you derive from this poem?

3) How does the poem reflect on coping with discomfort, accepting or tolerating it?

Outcome: Participants will be in a position to understand that instead of avoiding any situation that brings about discomfort, they can also accept it and tolerate it.

3. Practice Review

The previous week’s homework will be reviewed in this session. Any challenges that have been faced over the week are discussed.

Participants may have doubts about whether or not they can meditate. You will need to review the five common challenges faced during meditation like restlessness, sleepiness, craving, aversion, and doubt. This will give participants more confidence that they are not alone with such feelings.

Discussion points with participants

1) What are the repeated challenges being faced during practice? Sleep /Dullness/ restlessness /craving /aversion /doubt.

Name the challenges when they arise: for example- Oh, I'm feeling sleepy, I'm having some doubts, etc.

2) What is the experience you had during the SOBER breathing space practice?
3) How did you feel about the walking meditation being practiced?

Outcome: Any sort of confusion will be clarified and participants will have more confidence in the practice.

4.SOBER Breathing Space and its Use

SOBER breathing space has been practiced over the last two sessions, but with progression. This session too will have a small progression to the exercise. This aims to bring in daily life stressors and hassles to generalize the use of SOBER breathing space exercise.

You will have to make the participants break off in dyads, and discuss daily life hassles or other situations that tend to trigger his/her smoking behaviour. In the middle of the discussion taking place, you will need to ring a bell and stop the discussion. Then you immediately guide your participants through a brief SOBER breathing space.

Discussion points with participants

1) What did you notice from this exercise?

The experience may show how easy it is to forget mindfulness skills and get worked up over something that is not even happening. It can be challenging to stay present and aware in interpersonal situations.

2) What is it like to just stop and notice in the middle of interaction or experience?

Outcome: Participants gain an understanding of how mindfulness can be forgotten easily during the day especially in minor negative situations. They understand how rapidly this state can come up as and when they get distracted or agitated over a situation.

Use of SOBER Breathing Space

Challenging situations do not arise in therapeutic settings alone. This exercise aims to bring about an understanding of how to use SOBER breathing space as a solution for any challenging situation where a participant would otherwise want to smoke.

You will need to introduce the SOBER breathing space in challenging situations worksheet to the participants. Explain to them how it's use can be extended to everyday life. The worksheet could have the following columns to fill.

Explain each column to the participants before giving out the worksheet. You can also discuss examples while writing them on a whiteboard for participants to understand the worksheet better.

High-risk situations or triggers	Reactions (Physical, mental, emotional)	Practiced SOBER breathing (Yes/ No)	Response

Outcome: The learning is now taken to real-life situations where participants are more mindful of situations that act as triggers, how the body reacts to it, to practice SOBER breathing in such situations and see how they respond. Using this will help make the act of resisting a cigarette more tolerable.

5. Acceptance And Skilful Action

Mindfulness is all about acceptance. Accepting the present moment, no matter good or bad, is the main teaching of mindfulness. This session aims for the participants to accept aversions and cravings and welcome situations that may be challenging with curiosity.

Discussion points with participants

1) Till today we have learned to be aware of our experiences and accept them, so where does change fit in? If we accept everything?

Make participants understand that accepting everything does not mean taking a passive stance, but rather gives us a genuine choice of how to respond after seeing this in its full view and not judgementally with a sense of aversion.

“Grant me the serenity to accept the things I cannot change, the courage to change the things I can, and the wisdom to know the difference.”

2) So, what are we accepting?

Explain to participants to accept what is already here. Acceptance is not a passive stance but it is giving ourselves a choice on how we would want to respond.

Outcome: The essence of mindfulness is brought out through understanding how acceptance can change the way an individual responds to a situation, be it negative or positive. When it comes to cigarette smoking, individuals smoke when facing positive or negative emotions, unlike other forms of addiction. Acceptance of both positive and negative emotions help participants not to react in the usual way.

6. Home Practice

You will have to discuss the week's homework sheets with the participants which consist of the following.

1) Sitting meditation/ body scan or mindful movement 6 to 7 days.
2) SOBER breathing space worksheet.
3) Daily practice tracking sheet.

7. **Closing**

Like in the previous session you will end your session with 5 minutes of silence followed by the sound of a bell for participants to disperse.

SESSION 6

SEEING THOUGHTS AS THOUGHTS

Over the last five sessions, time has been spent on understanding mindfulness, and how it is natural for the mind to wander, how to gently bring a wandering mind back to focus, how one labels but eventually how the focus is brought back to the breath and the body. This session focuses on thoughts. The non-permanence of a thought is brought about through various exercises in the session and the importance we give to thoughts minimalized.

Session Outline

31. Starting the Session
32. Sitting Meditation
33. Review of Homework
34. Thoughts and Relapse
35. The Relapse Cycle
36. SOBER Breathing Space
37. Home Practise
38. Closing

1. Starting the Session

While all these weeks you have asked participants to speak about their present state, now you will ask participants to reflect, inviting reasons/ intentions for taking up training and how they can use their learnings over the last six weeks in their day to day life.

2. Sitting Meditation

This week's sessions look into thoughts. Hence the focus of this exercise would be on the participants' thoughts.

You, as a facilitator, will have to guide the participants through sitting meditation, but this time you will need to focus on thoughts. You will, through this meditation, make the participants focus on thoughts and understand that it is in the form of images and words and have the same power as sensations. It can be observed and let go. If your participants get lost in the content of a particular thought you will bring their attention back to their breath.

Bring the attention of the participants to observing and labelling thoughts.

1) Observing thoughts as leaves floating by on a stream

2) Clouds moving across a clear sky

3) Balloons floating away

4) Participants are encouraged not to hold onto thoughts but to increase recognition of thoughts as passing objects. There are no right or wrong labels.

Discussion points with participants

1) What was your experience from this exercise?

2) How does the use of metaphors feel to you while observing your thoughts?

Outcome: This exercise brings more understanding to the power that is placed on a thought. Participants by the end of the exercise understand that if a thought is not held onto or labelled, it does not hold power for a specific reaction to take place.

3. Review of Homework

You will need to review the previous week's homework to see what were the experiences of the participants while practicing at home, and also the challenges faced by them during practice.

Discussion points with participants

1) What was your experience practicing sitting meditation or body scan meditation?

2) What did you understand from your SOBER breathing space worksheet? (The experience will be discussed with regard to specific cues and thoughts)

3) Can some of you come forward and narrate a few items on your worksheet?

4) What can you decipher from such experiences?

Outcome: Using participants' examples from their worksheet, common triggers and reactions are discussed to make participants understand the commonalities of triggers. Their challenges brought out in this part of the session will bring them clarity and confidence in their practice.

4. Thoughts and Relapse

Thoughts play a major role in the relapse process. Participants are sensitized to thoughts not being permanent in the previous exercise. This part of the session aims to bring about a question of whether or not a thought is ‘true'. Even though one would like to let go of a thought, sometimes thoughts tend to stick and are not easy to let go of. Such understanding is important to overcome ideas of relapse.

Discussion points with participants

1) What do you feel is the role of thoughts in your relapse process

2) Can you define a thought? What is a thought? Do thoughts become true? Give an example...

3) Explain to the participants how an individual recognizes a thought. People see thoughts as ideas/ memories/ images or a string of words.

4) Explain to the participants how thoughts are linked to behaviour. Make participants understand that thoughts are not reliable reflections of reality. This can be done using examples. Elicit examples from the participants.

Outcome: Participants form an understanding that their thoughts do not make them who they are, contradicting popular belief. Thoughts are only ideas or memories or a string of words that keep changing by the second.

5. Relapse Cycle

Understanding that a thought may lead to a relapse is not enough. This part of the session aims to develop participants' understanding of the relapse cycle.

You will need to ask your participants for an example of an event that could be a potential trigger to want to smoke. Pick one example and ask participants to break down the situation to develop a chain that would lead to them smoking again.

You could explain the cycle using a diagram

Trigger---- initial reaction---- stop -----observe---- respond

Vs

Trigger---- initial reaction----Automatic pilot----thoughts ----automatic reaction ----more thoughts.

Discussion points with participants

1) Give an example of an event or a potential event that can be a trigger for relapse

2) Breakdown chain of events by identifying initial thoughts, emotional reactions, sensations.

3) Follow the chain to the point where one reacts as 1) full-blown relapse which causes great amounts of self-judgement or 2) step back and respond differently.

Explain to the participants that even during the initial stage of relapse, there is a choice. Abstinence violation effect which occurs due to intense self-judgement because of a single time relapse may increase the likelihood of full-grown relapse.

Outcome: After a long discussion on how a trigger could lead to a full-blown relapse and what components brings about such relapse, the relapse cycle is understood at the end of

this discussion.

6. SOBER Breathing Space

This exercise aims to bring about a sense of calmness after the previous discussion. You will need to take your participants through a SOBER breathing space exercise to reconnect with the present.

Outcome: Thoughts, reactions, and emotions are observed and participants are brought back to the present.

SOBER greeting space exercise is carried out. Observe the actions and thoughts and emotions and reconnect with the present.

7. Home Practice

At this time, you will prepare the participants for the end of the course by letting them know that they have only two weeks left for the completion of the program.

Discussion points with participants

1) Explore ways to personalize practice with your participants
2) Practice for short periods without verbal instructions
3) 40 minutes a day of sitting meditation or body scan meditation
4) Practice sober breathing space
5) A daily practice tracking sheet

8. Closing

You can end your session with 5 minutes of silence followed by the sound of a bell for participants to disperse.

SESSION 7

SELF CARE AND LIFESTYLE BALANCE

Over the weeks, participants have been given exercises that have made them more aware by paying attention to situations, thoughts, emotions, and sensations that may put them at risk of smoking again. This session focuses on the broader picture of life, what we would want from it, and how to achieve a healthier lifestyle.

Session Outline

39. Starting the Session
40. Sitting Meditation
41. Review of Homework
42. Daily activities worksheet
43. Understanding Relapse
44. SOBER Breathing Space
45. Reminder Cards
46. Home Practise
47. Closing

1. Starting the Session

You can start the session by having the participants reflect on what elements of the course they find to be most valuable and what they intend to continue practicing in their daily lives.

Outcome: the participants have an opportunity to recall and recommit to their intention for wanting to quit and coming for the program.

2. Sitting Meditation

As with other sessions, this session too includes sitting meditation, but focuses on loving-kindness. Loving-kindness is of importance in mindfulness as it brings in qualities of friendliness, goodwill, and compassion.

As a facilitator, you will have to modify the exercise from the traditional loving-kindness meditation to one which is most relevant and genuine for the group. You will need to guide the participants by reciting a script for loving-kindness meditation and develop on it to fit your group.

Discussion points with participants

1) What did you feel while doing loving-kindness meditation? (Check if there is any resistance, aversion or other challenging experiences)

2) Explain to participants that there is no such thing as a right or wrong experience.

Outcome: Participants will start looking at the broader perspective of life, understanding compassion and friendliness.

3. Review of Homework

After a week of home practice, participants are in a position to make the practice their own. This session of reviewing homework looks at participants' experiences in making the practice their own. You will need to make participants share what they are noticing in the process of making the practice their own. Check whether they have been able to find a routine that fuels sustainability and addresses ongoing barriers and challenges. Participants have also been continuing the practice of SOBER breathing space and may have experiences to share. This will also be brought up and discussed. The relapse cycle worksheet that is completed will have to be looked into. You can ask participants if they are okay with sharing a few examples. This, in turn, helps reiterate the importance of stepping out of the relapse process as early as possible.

Outcome: Participants will understand their experiences while trying to make the practice suitable for them. The phase should have transitioned to one which is not overwhelming.

4. Daily activities worksheet

This relapse prevention tool is intended to bring awareness to typical daily activities and how they tend to affect overall mood life balance, health in terms of nursing and depleting effects. This exercise encourages participants' reflection on how they engage in these activities, and whether the ways they tend to make a neutral activity depleting or neutral, or depleting activity more nourishing.

The purpose of this exercise is not to encourage them to eradicate all depleting activities, but, instead, to begin to bring greater awareness to how we spend our days, the quality of attention and presence we bring to activities, and how both the activities and the quality of attention to them tend to affect us. Some depleting or stressful activities may be avoidable, others may not. This is an opportunity for the participants to notice what is nourishing and depleting, and to explain how they might relate to the experiences differently.

You will have to explain the worksheet to the participants. The worksheet can have two major areas of exploration

1) List activities, people, and situations that you associate with distress and challenging emotions or that increase self-doubt, and describe how you feel when you engage in these activities.

Activity, person, place, situation	How do you tend to feel?

2) List activities, people, and situations that you associate with pleasure or the increase in confidence that you don’t relate to cigarette smoking.

Activity, person, place, situation	How do you tend to feel?

Outcome: Participants can differentiate between those daily activities that bring them pleasure or negative emotions and how it makes them feel.

5. Understanding Relapse

All sessions up to this one focused on triggers and relapse. This session, on the other hand, aims to widen the focus to lifestyle choices that make the participants more or less vulnerable to smoking relapses.

You will elicit examples from the participants which bring out situations or people that may make them vulnerable to wanting to smoke, and then explain where relapse begins by breaking the example down

Outcome: Participants are aware of spaces where a relapse could happen, thus being prepared to overcome the same.

6. SOBER Breathing Space

In case the previous discussion has brought about a sense of instability within any participant, it is best to focus on those feelings by guiding participants through the SOBER breathing space.

Outcome: The participants are brought back to focusing on the here and now.

7. Reminder cards

The reminder card is intended as a constant resource of support. It contains four sections and is the size of a business card.

Support information

- Participants personalize a list of reasons for continuing to choose to stay off cigarettes the most effective alternate coping behaviour.
- Emergency, or support telephone number
- The steps of the SOBER breathing space

This reminder card is carried in the pocket or wallet, and is readily accessible in high-risk situations

8. **Home practice**

You will discuss the homework for the upcoming week with the participants. The homework will include the following:

1) Create own practice routine 6 out of 7 days in the week
2) Sober breathing space in challenging situations
3) Complete reminder card

9. **Closing**

You will have to end the session by making the participants recall and reconnect with practice intentions that they identified at the beginning of the session.

SESSION 8

SOCIAL SUPPORT AND CONTINUING PRACTICE

This session focuses on the ending of the course. Having a system in place where the participants get the social support they need is important. Reflecting on the eight weeks and understanding the purpose of having gone through the program will help participants sustain the practice. Participants are shown that they can overcome barriers by asking for help and by developing a plan for continued practice.

Session Outline

1. Starting the Session

2. Body Scan
3. Review of Homework
4. Social Support
5. Reflections
6. Intentions for the Future
7. Concluding Meditation
8. Closing

1. Starting the Session

At the start of the session, you will encourage participants to be in the present and listen to other participants who will be invited to say one or two words describing a sensation /quality of mind, or emotion they are noticing in the present moment.

2. **Body Scan**

This body scan mainly focuses on the changes that might have occurred over the last two months. At the end of the program, you will bring to attention the body scan that was done at the start of the program.

You will guide the participants through the body scan meditation and you could narrate the poem Paradox at the end of the meditation.

Outcome: Participants will understand the changes that have occurred from the first time the scan meditation was done.

3. Review of Homework

At this stage sustainability of practice is the main focus, and hence home practice is reviewed. You will look into the challenges faced in the previous weeks' meditation practice. Check in on the process of establishing an individualized sustainable practice. A review will

have to be done to check experiences with SOBER breathing space and development of the reminder cards. Nourishing activities, home practice exercise, are also discussed.

4. **Support Networks**

Over the sessions, discussions have been on how to cope in stressful situations. In this part of the session, the focus is on support networks and their importance. Here the lenses of coping are expanded further onto networks where participants can go-to in case of vulnerable situations.

You will need to make your participants discuss the importance of social support networks.

Discussion points with participants

1) Why is support important to you and this process?

2) A list of meditation resources is given to participants.

Outcome: Participants now have a list of go-to people they can rely on in case they want to succumb to a trigger and smoke again.

5. **Reflections on the course**

You will use this time to let participants reflect on what has happened over the last eight weeks. This can be done both individually and as a group. Discuss participants' intentions for continuous practice and get feedback on how the course was to them.

6. **Intentions for the future**

The main aim of this discussion is to make participants identify the importance of continued practice and how powerful it is in comparison to having a facilitator.

Discussion points with participants

1) Why do you think you may continue with this practice? (Write answers on a whiteboard)
2) What type of practice do you intend to carry on?

3) How likely are you to continue to practice?

Outcome: Participants, through the discussion, understand the importance of continued practice

7. Concluding meditation

The last meditation honours each person's journey over the past 2 months and offers a brief loving-kindness meditation for self, fellow participants, friends and family and finally all sentient beings.

Place small stones in front of your participants and make them choose a small stone from a collection. This stone is the symbol of the rough, natural, flawed yet perfect beauty of each human being. Tell participants that it is kept as a reminder of the journey that the participant has been on, which he/she can.

8. **Closing Circle.**

You can close the session by making the participants sit in a circle and open up on any last moment thoughts or reflections. Welcome participants to share any final comments. The session ends with meditating in silence for 5 minutes after which it closes with the sound of a bell.